EXAMINATIONS

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Examinations

An account of their evolution as administrative devices in England

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© 1965 R. J. Montgomery

First published 1965

Printed in Great Britain by
The Bowering Press Plymouth

C.E R.T., West Bengal
ate 15. 3. 69
cc. No. 2037

Bureau Edn l. Psy. Research
[illegible]
Dated. 15. 3. 69
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Preface

Born into a family of schoolteachers, and plagued with tests and examinations at regular intervals from the earliest age, it seemed only natural to write about them. The 'eleven plus', the School Certificates and the Mathematics Triposes each had particular flavours of their own, and as the bulk of this work was written as a Ph.D. thesis, it may be said to have been generated by an examination itself. Grandfather's descriptions of life as a pupil-teacher were vivid and entertaining, with his tales of fainting from heat and overwork in a Science and Art examination. Father's progress through the 'Cambridge Locals', and with an external degree at London University after a training college course, gave interest if not insight into other examinations. Each examination appeared as a separate entity, with its own peculiarities and methods, and yet surely there was more to it than this. The tremendous growth of examination systems in number, size and influence is obvious to all. Extension of educational opportunity has been paralleled by expanded examination facilities so that, whereas there was virtually no public examining in 1800, it is rather difficult to avoid it today.

The dangers of writing about examinations are all too apparent. So much examining is carried out that it has become a specialist activity, and specialists tend to be jealous of their knowledge and critical of comment. No one person could hope to be thoroughly conversant with the detailed practices of more than one or two examinations. When an examination reaches a certain standing, books, pamphlets and articles are published, as it were, to pay it homage. Committees deliberate upon it and produce reports. There can be little scope for the outsider, and one must be an outsider because of the large number of examinations. The almost weekly comments in *The Times Educational Supplement* serve to convince all but the enthusiast or the connoisseur that everything that there is to be written about examinations has been written already. It is therefore difficult to embark upon such a broad topic without a feeling of presumption.

It is not intended that this should be a handbook of examination practice. When details of syllabuses are mentioned, they are intended to provide examples which help to illuminate administrative principles. This work is concerned with the control of examinations and with the long-term consequences of particular policies. It is generally more important to discuss such matters than it is to raise predictive efficiency by a minute fraction from one scarcely satisfactory level to another, which appears to be the aim and ambition of many a worker. Viewed in this way, it is surprising that the broad evolution of the large examination systems has not been considered more fully elsewhere.

It would be idle to pretend that much has not been omitted. Little mention has been made of the important external degrees at London University, for example, and less still of the Common Entrance Examinations to public schools. This study only selects some of the better-known systems, and the choice has generally been determined by their relative importance to modern educational problems, a matter that has had to be assessed subjectively. The approach in this work is historical, though my interests are current. For example, I confess to an enthusiasm for the evolving Certificate of Secondary Education, which is described in some detail.

Examinations can serve many useful purposes, yet most people have seen them acting as a dead hand, curbing the development of interest and reducing to the arid repetition of a syllabus learnt by heart the work of teachers able enough to know better. Examinations are necessary, and it is to be hoped that this work will encourage teachers to understand and use them to the full.

Dr. Sophia Weitzman, lately Reader in Educational Administration at the London University Institute of Education, has been most helpful over the years in commenting on the drafts, and her kind encouragement has been a very important factor in my finishing the work. Writing is a poor spectator sport, and I am indeed grateful for the forbearance shown in turn by my mother, wife and daughter, and particularly to my wife Diana who read the drafts with great care. The references in this study are mainly to books and papers rather than to persons. My thanks must be extended to those many colleagues and administrators who have been kind enough to discuss with me their business and to give me their informal views of examinations which have helped to keep my interest alive.

R. J. MONTGOMERY

Whetstone, 1964

Introduction

One of the purposes of this study is to consider examinations as administrative weapons, or as the tools of those whose business it is to execute policies. It should be clear that examinations need not only be regarded in this way. The schoolboy sees an impending examination as it affects himself, giving him something to work towards, or even something to dread. To the teacher, the external examination may appear as much a test of his efficiency as that of his pupils. Research workers may regard examination results as a suitable stamping ground on which to exercise their statistical techniques.

Examinations were, however, seldom provided for such personal reasons: they were usually introduced to implement important principles in public life. It will be shown that the system of honours degrees was designed to raise standards at the ancient universities, and that the Civil Service examinations were intended to do away with the evils of patronage. The School Certificate system which preceded the G.C.E. was started to correlate standards among a variety of existing examining boards and also to prevent children from being entered for one examination after another. These systems and many others will be described in some detail in the following chapters. It will be shown how the original purposes were often clouded over with the passage of time, and with changing conditions. Examinations will be shown to be extremely flexible tools, capable of several distinct functions. It has been demonstrated elsewhere that one examination, such as the 'eleven plus' examination for secondary school selection, may itself carry out several functions at once.[1] It may be used to maintain standards, give an incentive to effort, help administrators in their work or be a tool of social engineering.

The examination systems, seen as a whole, rather exceeded their basic administrative functions. So successful were they in raising standards, so convenient in administration, that they proliferated after the middle of the nineteenth century. As highly qualified honours graduates left Oxford and Cambridge in the early nineteenth century to permeate the Civil Service, the schools, Churches and voluntary societies, so they tended to perpetuate the type of competitive examination in which they had succeeded. It was not long before the nature of society itself began to change, as better qualified specialists came to play more important roles. The idea of a 'meritocracy' could be developed, as a society began to emerge in which education and responsibility were given fully to the ablest and most industrious.[2] Examinations did not produce this state of affairs by themselves. The nation's productive capacity was expanding because of scientific advances and foreign competition. But advanced technology required well-qualified manpower, and examinations played their part in providing this.

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[1] N. Morris: 'An Historian's View of Examinations', in *Examinations and English Education*, S. Wiseman, ed., 1961, pp. 1–26.

[2] M. Young: *The Rise of the Meritocracy*, 1958.

The examinations grew in complexity, and the numbers of candidates increased; they developed as individual organizations, often in a common English pattern with voluntary inception followed by expansion, centralization, and finally by delegation. The systems also developed together, taking their places in a nation-wide system of education so that young persons, particularly the able, were faced with a series of examinations, one after the other, from an early age.

Examinations soon began to dominate the curricula of schools and colleges. The larger the examining boards grew the greater was the danger of their becoming remote from individual schools. For all their vaunted liberty in the classroom, teachers could often become the slaves of their syllabuses. Those controlling the examinations were therefore in an exceptionally powerful position in the education system. The structure of the control of examinations was, presumably, crucial in English education. Yet the administrative structure of examinations had grown up in an historically haphazard way, so that the needs of the twentieth century were often being met by bodies whose structure was first formed a century before. Of course there were changes. The university examining boards which dominated the secondary schools, for example, brought in teachers as examiners and committee members, who took over effective control to a very substantial degree. The introduction of the Certificate of Secondary Education, which was designed to cater for the delegation of examining to small local committees of teachers and for the external assessment of school examinations by bodies of regional standing, was a modern approach to the problems of examining.

Many books have been written to describe individual examination systems, of which James Petch's description of the Northern Universities Joint Matriculation Board is an outstanding example.[1] The annual reports of the various examining bodies are a mine of information for the persistent reader. Much use has been made of such books and pamphlets in painting a full picture in this study of the larger secondary school boards. Much less has been published about the local examinations used in secondary schools, about the examinations of the regional examining boards, and of other examinations used in technical and further education, but an attempt has been made to fit these into the picture. Mention has also been made of such recent arrivals as the Diploma in Technology and its successors.

A considerable amount of research has been carried out elsewhere into the actual mechanics of some of the examinations, but perhaps less has been done to probe the fundamental reasons for having them. With examinations largely determining the shape of society and affecting the distribution of power in the land, it seems more essential that their control be studied carefully than that the time be devoted to improving the technique of testing, important though this is. Control by teachers has been surveyed in some detail, for this has been a growing feature of most examination systems. Control should ideally be held by competent and responsible bodies, sensitive to the needs of the candidates, and attempts have naturally been made to ensure this. There have, however, been frequent claims that examinations themselves have taken control, that they have determined school curricula, or that a resulting 'aristocracy of intellect' has as its complement a rebellious or weakly motivated proletariat. These attacks upon the underlying ideas have been reported in the following pages as they occurred.

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[1] J. A. Petch: *Fifty Years of Examining*, 1953.

CHAPTER ONE

Oxford and Cambridge and the Beginnings of Competitive Examinations

I. INDEPENDENT EDUCATIONAL INSTITUTIONS

Those brought up in a later age might well have difficulty in visualizing a state of affairs in England and Wales without the local and central education authorities. These influential bodies, developed within living memory, often appear to have been endowed with permanence, so powerful a part do they play in the life of the nation. Education came to be an effective business of the State, through its central and local organs, in the nineteenth century, and it is in the direction of state organized education that one might first glance to see how English education has evolved. A longer look at the educational history of the country would show how large a part has been played by bodies more or less independent of the Government, even in recent years.

The modern universities follow the traditions of freedom from central interference suggested by the examples of Oxford and Cambridge, even when they accept grants from the Government.[1] The modern public school is the descendant of the independently-minded public or endowed school of the nineteenth century. The Church of England continues to provide schools and training colleges, and so do many of the other religious bodies.[2] An inspection of the advertisements in almost any copy of *The Times Educational Supplement* will give an indication of the strength of independent institutions, even in an era of publicly provided education.

These bodies formerly bore a responsibility which was relatively much larger. It is not so long since education was generally felt to be the concern of the Church rather than of the State. Certainly the State has never been alone in satisfying national requirements, nor has it necessarily taken the initiative in promoting such matters. Indeed, the early history of the Education Department shows that central grants were made available merely to help in work which had already been started by voluntary bodies.[3]

The full picture of the development of examinations cannot be painted without reference to the early history of those ancient bodies, the Universities of Oxford and Cambridge. It will be shown that the examinations taken by thousands of children in secondary schools organized under the central and local authorities are direct descendants of the original 'Oxford University Locals' of 1858. Examinations were taken in the universities long before the nineteenth century, however, and it would be rash to leave out all mention of their early origins.

[1] B. Truscott: *Redbrick and these Vital Days*, 1945, pp. 61–67.

[2] R. Armfelt: *The Structure of English Education*, 1955, Chapters V and VIII.

[3] See Chapter 2.

The main difficulty is one of keeping to the point, for their history is more than amply documented elsewhere. For present purposes it will be sufficient to take mere glimpses of Oxford and Cambridge, and of their examinations at particular times. To follow their history too closely would be to lose track of this study.

2. MEDIEVAL OXFORD AND CAMBRIDGE

At first sight it might appear difficult to defend a proposition that the early medieval universities served national purposes at all. When reference was first being made to the English universities at the turn of the twelfth century there was much less consciousness of nationality than was to develop later. Despite civil strife there was considerable ecclesiastical unity in Europe.[1] The monastic orders, for example, owed their allegiance to Christendom rather than to any particular kingdom. Latin, too, was the common language of the educated clergy, and served to emphasize the catholicity of the age. Linked with this was the freedom of the individual student to move from place to place in search of knowledge. Good teachers attracted pupils from afar by their reputation. The University of Salerno acted as a magnet for medical men, Bologna was famous for its law schools, and students flocked to Paris to sit at the feet of Abelard.[2]

The students and their masters, with the advantage of being clergy, were in a more privileged position than most. In the numerous disturbances which occurred in these communities of young men, the right of disciplining the malefactors came to be contested between the civil and ecclesiastical authorities. In important matters the King and the Pope lent their influences. The universities, flourishing in the cleft between Church and State, created their own loyalties, and became influential bodies in their own right. Thus, broadly speaking, internal discipline came into their hands. When Church and State did combine, as they did to suppress Wycliffe's ideas in 1411, the University of Oxford was forced to lose some of its independence and, in fact, lost many of its privileges for over half a century.[3]

The University of Paris was really the archetype for the English universities, and Hastings Rashdall showed how this great organization grew out of the cathedral school in that city.[4] The University was thus intended to be subject to the jurisdiction of a bishop's chancellor, who exercised his control of education by granting the licence to teach. The Chancellor at Oxford was in a less powerful position for a variety of reasons. The Bishop of Lincoln, in whose diocese Oxford lay, lived at a great distance. In addition, evidence suggests that the members of the University arrived in the town after a dispersion, or mass exodus, of the University of Paris; they may therefore have arrived as a partly organized group. In practice, the Oxford Chancellor came to be chosen from the ranks of Masters by the Bishop, if not actually elected by them.[5]

A licence to teach, issued by a university or bishop's chancellor, would have had little value without membership being granted to the candidate by the existing masters. In this way, although power lay nominally in the hands of the Oxford Chancellor, it came to rest effectively in the hands of the Masters, the senior members of the University.[1] They awarded degrees on the results of examinations and other scholastic exercises, and thus perpetuated their own kind.

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[1] H. Rashdall: *The Universities of Europe in the Middle Ages*, ed. F. M. Powicke and A. B. Emden, 1936 edn., Vol. I, p. 2.

[2] Ibid. Vol. I, Chapters 1–3.

[3] Ibid. Vol. III, pp. 135–36.

[4] Ibid. Vol. III, Chapter 5, Section 1.

[5] Ibid. Vol. III, p. 12.

In seeking to show the part played by Oxford and Cambridge in satisfying the nation's educational needs, it is best to look for the reasons which brought the students to these towns. They came not to receive a liberal education, as they did later, but to gain certain professional qualifications.[2] Students were prepared for preferment in the learned professions 'that there might never be wanting a supply of persons duly qualified to serve God both in Church and State'. Even in the Middle Ages a certain amount of technical expertise was necessary for the smooth running of society. At the university the young man could attend the basic arts course, or better himself further in medicine, law or theology.[3] The nature of the examinations will serve to illustrate the position of the universities, for these examinations were the concern neither of the King nor of the Church, but of the individual universities alone. There were occasional appeals to outside authorities, when the Lollards were being persecuted at Oxford, for example, and when the mendicant orders upset the *status quo*.[4] Nevertheless, there was considerable stability for several centuries, and essentially the background to the examination system altered little.

Guilds flourished in the Middle Ages, as groups of men with a common interest, for example in commerce, banded together for mutual protection. When scholars, often strangers, found themselves together for a similar purpose, it was only natural that they should organize themselves in the same way. The arrangements varied from one place to another: in one there might be guilds of students, in another guilds of masters, by accident of history.[5] There were, however, certain features in common throughout Europe, for students proceeded 'by degrees'. Just as weavers who began as apprentices became first journeymen and later masters of their trade, so did the student advance in knowledge and status. For three years he might be a 'sophister' or 'disputant' in the schools, studying the three arts of grammar, logic and rhetoric which made up the 'Trivium'. He might then be examined and admitted to the degree of Bachelor of Arts. The next four years might be spent in working for the 'Quadrivium', which comprised the four arts of arithmetic, geometry, astronomy and music.[6] There was considerable local and individual variation in practice, but at the end of this time the student might be tested and accepted as a Master of Arts with what was, in the early days of the universities, the right and even the duty of teaching.[7] He could, if he wished, enter one of the three higher faculties to read law, medicine or theology. The process of acceptance in each of these higher faculties was similar to that in arts.

The conditions of acceptance as a Bachelor or Master are difficult to describe in

[1] H. Rashdall: op. cit. Vol. III, p. 64.

[2] Ibid. Vol. III, pp. 444–47.

[3] Ibid. Vol. III, pp. 152–60.

[4] Ibid. Vol. III, pp. 66–77 and pp. 128–36.

[5] Ibid. Vol. I, p. 5.

[6] Ibid. Vol. I, pp. 34–35.

[7] Ibid. Vol. I, p. 465 (Paris).

detail because they varied over the years. The methods bore little resemblance to their twentieth-century counterparts. First, acceptance depended on whether a candidate had attended a certain prescribed course of lectures. Secondly, he had to have participated in some disputations (e.g. 'Sophomes', 'Inceptions', 'Determinations' and 'Quadragesimals'); and thirdly, he needed to have answered certain questions orally (e.g. 'Priorums' and 'Postiorums' in logic at Oxford). Fourthly, there might be set pieces, such as 'Clerums' and other sermons. The conditions altered little by little over the years, while at the same time the original studies were altering rapidly. It became common for the aspirant to apply for a 'grace' or dispensation from the Congregation of Masters by the fifteenth century at Oxford, to relieve him from following every detail of the elaborate set of regulations. This device became particularly useful as certain fields of study became obsolete, and some extra conditions might be imposed instead: a sermon or contribution of money, for instance. There was less formality than might be supposed from glancing at a list of set books, lectures, and other conditions of graduation of the period.[1] It seems probable that every case came to be considered on its merits. It may be supposed that this system worked smoothly so long as the Masters who controlled it were jealous of their status, were intent on maintaining the standards of their degree, and were directly dependent on their position as university lecturers for their livelihood. The position changed from this at the end of the Middle Ages.[2] Professional scholars then began to look to the fat college fellowships rather than to their traditional emoluments as lecturers. A remarkable feature of the medieval examinations at Oxford and Cambridge is that certain vestiges linger. The words 'responsions', 'moderators' and 'wranglers' still exist as relics of the scholastic debates which helped to determine admission to the various stages and continued to flourish in the early seventeenth century. One still becomes first a Bachelor and then a Master of Arts.

Examinations in the English medieval universities were tests of worthiness for admission into a closed and independent body of scholars. Their importance for the purpose of this study is that they were tests of competence and industry, and that they played an important part in removing effective power from the local Bishop (of Lincoln or Ely) and accumulating it in the hands of the Masters. The Bishop, through his Chancellor, originally had the right of controlling teaching by issuing his '*ius ubique docendi*' to suitably conformist candidates; but this power was gradually transferred as the Masters came to elect their Chancellor. Inception into a guild of masters came to be the necessary condition for teaching at a university.

Towards the end of the Middle Ages many colleges sprang up, partly to help to provide good conditions for students and to remove some of the stresses inevitable in an era of 'town and gown' upsets.[3] The first college in Oxford, Merton, was founded in the late thirteenth century, but the bulk of the foundations came several decades after this, while new colleges continued to come into existence fairly regularly until the seventeenth century. The colleges which began so inconspicuously were to play an ever more important part in university life. Despite the foundation of certain professorships at the beginning of the sixteenth century, university teaching declined, and instruction was carried out more by the college authorities than by those of the universities. The colleges came to be wealthy in time, their fellowships provided a source of tutors, and these tutors taught the students. The use of printed books may also have had important repercussions in hastening the decline of university as distinct from college teaching. With the Reformation, the old scholastic curriculum lost much of its meaning, and the colleges rather than the universities tended to cater for the new classical studies.[1] A university rapidly came to mean little more than a conglomeration of colleges, and this tendency was made more formal by a sequence of legislation.

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[1] H. Rashdall: op. cit. Vol. III, pp. 153–60.

[2] Ibid. Vol. III, p. 163.

[3] Ibid. Vol. III, pp. 169–235.

3. A PERIOD OF OUTSIDE INTERFERENCE

First, when Queen Elizabeth I attempted to form a national Church, she gave power to the Heads of Houses, and thus to the colleges. The Queen felt that Oxford and Cambridge, with all their close associations with the Church, should be rendered safe. She may have felt that a unified and independent university was likely to be more dangerous than a group of independent colleges. In the second of her Codes, of 1570–71, she altered the Cambridge system of government by arranging for the Heads of Houses alone to nominate two officers for any of the university posts, election being carried out as previously by the Masters. Further powers were added to this: both within the colleges and in university affairs the college heads became paramount. A similar policy was carried out at Oxford between 1565 and 1588 by the Chancellor, Robert Dudley.[2]

Secondly, King James I tightened his grip by requiring all those taking university degrees to subscribe to the Thirty-Nine Articles of the Church of England, and to take the Oath of Supremacy.[3] In consequence of such exercises in state control the universities in England became dominated by the Church and by the Crown. They sank in time to what is sometimes described as their lowest ebb, as mere seminaries of the Church of England. The brilliance of a Newton served only to make the shadows seem darker.

The Laudian Statutes, the result of the Oxford reforms of William Laud, Archbishop of Canterbury, in the reign of Charles I, are probably those best known to the layman. Laud's Code accepted the scholastic methods of the early Middle Ages, while catering for the new studies which had emerged.[4] In addition, he attempted to insist on higher standards. William Costello has shown the extent of scholastic methods in the early seventeenth century when they were, he argued, meaningful.[5] Oxford undergraduates were required by Laud to 'respond' once and to 'oppose' once in the disputations in the so-called 'Parvises', and also to respond once under a bachelor. After two years' residence the student became a 'general sophist', with termly disputations to occupy him until he took his bachelor's degree. At this stage he had to take a public examination in grammar, rhetoric, logic, moral philosophy, geometry, Greek and philology. Candidates for a master's degree had to undergo further exercises, and pass an examination in astronomy, geometry, metaphysics, history, Hebrew, Greek and natural philosophy. The examinations were all to be conducted by Regent Masters appointed by the Senior Proctors.[1] These examinations soon failed to be effective for a variety of reasons, not least the onset of the Civil War. Apart from this, the university lectures withered away with the growth in power of the colleges; the stipulated books became outdated, and even in the early years there had been collusion between the examiners and the candidates. By the end of the eighteenth century the examiners at the first degree stage were usually friends of the candidates and were expected to ask traditional questions. The disputations degenerated into certain prepared arguments, memorized beforehand. Some higher degrees might be obtained by payment and without the exercises stipulated, and examinations came to be held privately by examiners who were not reponsible to public opinion, and who were not themselves selected for their ability or impartiality.

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[1] H. Rashdall: op. cit. Vol. III, p. 1500.

[2] A. I. Tillyard: *A History of University Reform*, 1913, pp. 11–13.

[3] Ibid. p. 152.

[4] C. E. Mallet: *A History of the University of Oxford*, Vol. II, 1924, pp. 318 ff.

[5] W. T. Costello: *The Scholastic Curriculum at Early Seventeenth-Century Cambridge*, 1958.

Wendeborn, a foreign observer who travelled through England in the second half of the eighteenth century, gave an account of an examination at Oxford which reveals the extent of the decay of the system by that time. The 'Praeses', the 'Respondent' (or candidate for a degree) and three 'Opponents' came into the schools and 'amid profound silence passed the statutory time in the study of a novel or other entertaining work'.[2] Further tales of such abuses abound, being probably somewhat exaggerated. Real learning and teaching in the eighteenth-century university, when this was done at all, was carried out in the colleges where there were conscientious tutors. Descriptions of the universities in the eighteenth and early nineteenth centuries suggest a period of somnolence, of complacency, of lack of academic purpose. Yet by the end of the nineteenth century much of this had changed, and reform was very largely achieved by a new outlook in examining.

4. THE BEGINNINGS OF REFORM

Reform came first from the universities, and of their own initiative. In her studies Cambridge never quite sank to the depths of Oxford in the eighteenth century. The Mathematical Tripos became formal between 1747 and 1750, and an honours list was published. In little over a decade, written as well as oral questions were being asked in addition to the basic system founded on scholastic debate and similar exercises of an earlier age.[3] The candidates were split into 'classes' after a 'Grace' in 1779, the first rough divisions being known as 'brackets', and the final order of merit as the '*finalis honorum designatio*'.[1] The number of classes was reduced to four in 1828, and it was at this time, too, that it became possible for common question papers to be given to several classes; these were printed and made public. Chancellors' Medals were awarded from 1751 onwards to stimulate classics similarly.[2] From being an expedient in the eighteenth century, this style of competition was to be elevated into the principle behind many of the important examination systems of the nineteenth century. The new type of examination increased in efficiency with the years. Two moderators and two examiners had been appointed annually at Cambridge to examine in mathematics since the earliest days of the Tripos, and continuity was not neglected, as it was usual to have as examiners the moderators of the previous years. It had been proposed that Cambridge methods be copied at Oxford as early as 1773, but nothing came of this immediately.[3]

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[1] *The Report of Her Majesty's Commissioners appointed to inquire into the State, Discipline, Studies and Revenues of the University of Oxford*, 1852, p. 57. (O.U.C. Report, 1852.)

[2] Sir W. Hamilton: *Discussions on Philosophy and Literature, Education and University Reform, Chiefly from The Edinburgh Review*, 1852. A footnote to p. 668 refers to G. F. A. Wendeborn: Beschreibung &c. III, pp. 218–19.

[3] W. W. Rouse Ball: *A History of the Study of Mathematics at Cambridge*, 1889, pp. 187–219.

The Examination Statute of 1800 marked the first step in Oxford's examination reform.[4] A knowledge of grammar, rhetoric, logic, moral philosophy, and of elementary mechanics and physics was required, much as before, from aspiring bachelors, but Latin and Greek were especially encouraged. Public Examiners were to be appointed to ensure some common standard. The great innovation at Oxford in 1800 was that distinctions were to be granted and a list published of the twelve best candidates in order of merit, with possibly a second list to follow. In 1807, honours candidates were allowed to take either *literae humaniores* or mathematics and physics, because the original course had proved too broad. These honours were still to be taken in addition to the normal degree requirements, and only became distinct in 1830. The Examiners became salaried and more permanent from the beginning of the century, while from 1820 onwards more and more written work was introduced. In 1808, the old scholastic exercise of 'Responsions in the Parvise' was replaced by an ordinary examination, and all students thus came to be examined before they actually took a degree, whether or not they were reading for honours.

Meanwhile, Cambridge had introduced civil law classes in 1815, later to be followed by a Law Tripos. The Cambridge Classics Tripos did not arrive until 1824. It should be noted that only those who had obtained honours in the Mathematics Tripos might sit for this, but then the honours school or tripos system was built up in the form of a competitive superstructure on top of the original system. Those who did not pass in an honours school were awarded an ordinary or 'poll' degree, and from being a large majority in the first half of the nineteenth century such poll men became a minority early in the twentieth.

The Cambridge examination machine became more and more streamlined in the first half of the nineteenth century. By 1839 it was said to be a thoroughly efficient means of discriminating merit at the least cost of labour and time.[1] Common papers were set throughout, after the Code of Regulations sanctioned in 1837, and the precedence of mathematics and natural philosophy was confirmed also. The Elizabethan system was thus set firmly to one side. Moral philosophy, which had destroyed the homogeneity of the Tripos, was rejected, as an obstacle to direct classification. The interference of the 'Fathers of the Colleges' in determining results also proved inconvenient to the examiners, and it was removed accordingly. The Cambridge examinations became increasingly simple, and more competitive. They also began to determine the education, but that was always the price that was to be paid for the elimination of jobbery and favouritism. It was stated in 1877 that a belief in the sanctity of examinations thus became an article of every Cambridge man's creed, and it was this attitude that was to have such important effects on the public examinations outside the universities.[2]

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[1] H. Latham: *On the Action of Examinations considered as a Means of Selection*, 1877, pp. 144–46.

[2] W. Whewell: *Of a Liberal Education*, 1845, pp. 169 ff. This gives a general description of Cambridge examination methods in the eighteenth and nineteenth centuries.

[3] J. Napleton: *Considerations on the Public Exercises for First and Second Degrees in the University of Oxford*, 1805. (First published anonymously in 1773.)

[4] C. E. Mallett: op. cit. Vol. III, 1927, pp. 167–69.

The Cambridge University Examiners came to regard classification as their *raison d'être*, and a similar attitude grew up at Oxford. The Examiners were university as distinct from college men, although in fact they were doubtless members of colleges. Henry Latham, writing in 1877, went so far as to state a 'positive law' to the effect that when examination was left in the hands of examiners, and was not controlled by those directly interested in education, discrimination became more important to the examiners than anything else.[3] Examinations at Oxford and Cambridge were moving right away from their original function of qualifying a candidate for admission to membership of a closed body of men. They were moving away, too, from their natural function of testing the various academic studies at the end of a course. Instead, the examinations provided a cockpit in which the best young minds of each generation were tried out against one another. It was almost as if the subject matter of the examinations were irrelevant; and yet the examinations were determining most of the university curriculum. Certain measures were soon to be taken to broaden the range of subjects.

As the examination systems proved their worth in encouraging study, so did new honours schools and tripos examinations emerge. A First Public Examination, known as 'Moderations', was introduced at Oxford after 1850, and two new 'schools' were conjured into existence by the same University Examination Statute: in natural science, and in law and modern history. All candidates for a first degree were required to pass examinations at either honours or common level in two 'schools', one of which at least was to be *literae humaniores*.[4] Cambridge introduced triposes in moral science, natural science and theology between 1851 and 1856; a further spate of examinations came after 1875, beginning with the Historical Tripos. As the examination system spread, so did the universities find themselves catering for more able students, but this is not to imply that examinations alone were responsible. Nor would it be true to suggest that the universities were capable of reforming themselves unaided. Criticism abounded in the nineteenth century, and included charges concerning the inutility and ineffectiveness of the studies pursued, and the religious and social exclusiveness; there was much concern about these matters in outside circles.

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[1] H. Latham: op. cit., pp. 148–49.

[2] Ibid. pp. 152–53.

[3] Ibid. p. 148.

[4] C. E. Mallett: op. cit., Vol. III, p. 297.

In the first decade of the nineteenth century, *The Edinburgh Review*, a well-known political journal, began to publish articles criticizing the scheme of things at Oxford, and especially the nature of the studies.[1] Briefly, reformers showed in this first phase of criticism that the curriculum was narrowly classical, and that the standards required for graduation were too low. Apologists for the existing system put up a strong case for the type of education that was being given, but could scarcely deny that the standards were low.[2] A fresh attack began in the 1830s with further articles by Sir William Hamilton in the same journal. He criticized, amongst other things, the Cambridge curriculum, which was largely mathematical, stating (oddly enough to modern ways of thinking) that it was neither conducive to generalization, nor to logical study.[3] Such words as 'illegality', 'perjury', 'treason', and 'corruption' were bandied about, and the force of Hamilton's invective appears stronger when it is realized that he had himself been a student at Balliol before taking up a professorship at Edinburgh. Hamilton employed the historical method to throw fresh light on the growth in power of the colleges.[4] Power was shown to be in the hands of the wealthy colleges which were unwilling to exert themselves in educating undergraduates. It should be placed instead, said Hamilton, in the hands of the universities, at that time little more than rather ineffective examining bodies. That Oxford was capable of being improved was shown by his table of university successes which compared the performances of the weaker colleges with those of the few good ones.[5] Later writings of Mark Pattison and others made it plain that the intellectual sluggishness of the universities was not caused by the over-development of the colleges alone, as Hamilton had demonstrated, but also by the peculiar relations existing between the State, the Church of England and the universities, following the Reformation.[6]

The Earl of Radnor introduced a Bill in the House of Lords in 1837 to strengthen the universities, but this was withdrawn when the Vice-Chancellors gave the sponsors to understand that the colleges were willing to reform themselves, through their own 'visitors'.[7] Some of the practical difficulties of state interference in the nineteenth century will become apparent below.

The basis of the suggestions made by Sir William Hamilton was that there should be a better relationship between the colleges and the universities. The Oxford Examination Statute of 1800 resulted in a triumph for the classical approach to education, and the college tutors (as well as an increasing number of private tutors) concentrated on teaching little but classics, which was the main subject for examination purposes. The university professors of such subjects as physiology, chemistry, and other natural sciences found that students had little incentive to attend their courses, for the keener students looked rather towards their college tutors and the honours examinations.[1] Oddly enough, more professorial chairs had been created quite recently, in political economy, Sanscrit and mineralogy, for example, and many professors were obliged to lecture in almost empty rooms. A similar gulf between the university and college courses had emerged at Cambridge.[2] Professors, it should be realized, could lecture in a wide variety of subjects, together covering almost the whole of what was then understood to be human knowledge. The students, on the other hand, were divided into small groups by colleges. Organization and instruction within the colleges implied a smaller variety of choice in the matter of subjects taught. This, added to the natural reluctance of the college tutors to change their way of life, resulted in a fairly strict adherence to classics and mathematics. Cooperation between the colleges, and the sharing of tutors, came much later. Many reformers felt that only Government interference would alter matters sufficiently, and the Royal Commissions of the 1850s followed. It slowly came to be realized that the affair could be resolved by compromise, and that university professors were quite capable of being college and university men at the same time. In so far as this study is concerned, the significance of all these arguments was that, first, the issue was brought to a head by the working of the honours examination in classics initiated in 1800 at Oxford, and by the earlier Mathematical Tripos at Cambridge. Secondly, the arguments died out with the growth in variety of honours courses after 1850, and as the university professors and lecturers were gradually welded together to form a useful, varied, and well-endowed body of teachers.

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[1] *Edinburgh Review*, XI, January 1808, pp. 378–79; XIV, July 1809, pp. 429–41.

[2] E. Copleston: *A Reply to the Calumnies of The Edinburgh Review against Oxford, Containing an Account of Studies Pursued in that University*, 1810.

[3] Sir W. Hamilton: *Discussions*, pp. 263. ff.

[4] Ibid. pp. 401 ff. [5] Ibid. pp. 742 ff.

[6] M. Pattison: *Suggestions on Academical Organization*, 1868, p. 324.

[7] *Parliamentary Debates*, XXXVII, Col. 1001 ff, 11 April 1837.

Much of the nineteenth-century reform was carried out as a result of public pressure, with the threat of Government interference as a stimulant. Thus Charles Lyell, though no stranger to the universities, proposed a Royal Commission.[3] Other reformers argued that internal reorganization was possible and preferable.[4] The Earl of Radnor's unsuccessful Bill of 1837 called for a Commission, and there had been moves previous to this aiming at the abolition of religious tests. Royal Commissions on the universities were ultimately formed by the Government in 1850, fanning discussion and speculation to fever pitch.

Bonamy Price, writing at this time, advocated an examination at matriculation for all students, with the first degree examination taken in two parts.[5] He made an attempt to reconcile tutors and professors by arranging for tutorial instruction for two years (ending in an examination), to be followed by university, as distinct from college, courses in divinity, history and philosophy. When Price published a second pamphlet in 1875, notwithstanding the Universities Acts which had been passed, he could still lament that the examinations were in the hands of the college tutors, and that they could 'only be what the college tutors choose to make of them'.[1]

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[1] O.U.C. Report, 1852, pp. 95 ff.

[2] C.U.C. Report, 1852, pp. 80 ff.

[3] C. Lyell: *Travels in North America*, 1845, Vol 1, pp. 271–316.

[4] A. I. Tillyard: op. cit. pp. 100–7.

[5] Bonamy Price: *Suggestions for the Extension of Professorial Teaching in the University of Oxford.* 1850, pp. 25–31.

The Royal Commissions were finally formed after several previous attempts in Parliament, and they published their Reports in 1852, necessarily on the evidence of individuals rather than colleges. The Colleges reacted strongly to outside interference, and a large number of Heads of Houses refused to have anything to do with the Commissioners, who could only take evidence voluntarily given.[2] The recommendations were numerous. The Oxford University staff (professors, and now lecturers too) was to be strengthened, and partly wedded to the tutorial system; non-collegiate students were to have facilities available; closed college scholarships were to be diminished and such funds distributed; and a public matriculation examination was advocated for university entrants.[3] University government was to be made rather less the exclusive preserve of Heads of Houses. The Cambridge Commission made similar proposals, even giving veiled encouragement to complete religious tolerance. Both Reports advocated a broadening of the possible courses of study by instituting new Schools and Triposes, several of which were already functioning soon after the Reports were published.[4]

The Oxford University Act of 1854, and the Cambridge University Act which followed it in 1856, resulted in many of the Commission's proposals being realized. A Hebdomedal Council was to be formed at Oxford to initiate legislation, many closed scholarships and fellowships were to be abolished, licensed halls were to be permitted apart from the colleges, and the Church of England oath at matriculation was to be rendered obsolete. The 1856 Act made recommendations in the same spirit, again to be carried out with the aid of a temporary Commission formed for the purpose. The immediate result of such legislation was disappointing to the keenest reformers, though it has been argued that the numbers of undergraduates doubled largely because of these reforms.[5] The proposals of the Commissions had been whittled down when it came to the Bills, Parliamentary committee work resulted in diminished effectiveness for certain reforms, while the actual application of the Acts by the new Commissioners was again criticized. The colleges did little willingly, and the bolstering up of professorial teaching did not work out as planned. Clause 27 of the Cambridge University Act made it possible for colleges previously hampered by ancient rules to reapply their funds to university purposes and to similar ends, and to provide open scholarships, but there was less compulsion for them to do so than might have been expected. Nonconformists were left with a feeling of bitterness because they were still denied a full place in university government at a time when it was estimated that a third of the nation were dissenters.[6] The popular emphasis moved for some years from organizational to religious reform, for something had been done, and, if nothing else, the Government had succeeded in affirming the principle that it had some right to interfere with the universities.

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[1] Bonamy Price: *Oxford Reform*, 1875, pp. 16–17.

[2] O.U.C. Report, p. 1.

[3] Ibid. p. 68.

[4] O.U.C. Report, pp. 69–85, and C.U.C. Report, pp. 24–26.

[5] A. I. Tillyard: op. cit. p. 156.

[6] Ibid. pp. 133–61.

The legislation of the 1850s had set a precedent, and the Universities Act of 1877 which followed a Royal Commission Report of 1874 was carried through more easily because of it.[1] The two sets of Commissioners formed by this Act were to concern themselves mainly with the rearrangement of finances, and this resulted in the reduction of sinecures, the application of college funds to university purposes, and an increase in the number of open scholarships. Open competition thus received encouragement at the universities, apart from the honours degree arrangements. Better-known effects of the Act included the abolition of celibacy and the ordination requirements for fellows of the colleges.[2] Parts of the 1882 Statutes of Cambridge University, which were promoted by the Commissioners, are of interest here. Special Boards of Studies were formed for each subject or group of subjects to determine the studies, lectures and examinations of the University, and to relate them together. A General Board was to control such schemes.[3]

There were frequent attempts in the nineteenth century to free Oxford and Cambridge of religious 'tests'. Such 'tests' had served to ensure that the universities remained almost wholly the preserve of the Church of England. The connection between religious tests and university examinations may seem a tenuous one, and as the tests only consisted of oaths to be sworn at matriculation, the association may seem to be merely incidental. The examination system became a device that served to keep the universities orthodox, because of the mixture of medieval and Stuart statutes which governed them. Although degrees were coming to be recognized in the nineteenth century as academic qualifications, indicative of a certain level of attainment, medieval traditions lingering on suggested that a master's degree denoted, rather, acceptance as an equal by a closed body of men. In yet another way, Elizabethan and Stuart controls came to demand orthodoxy, both religious and to an extent political, and degrees remained analogous to those licences of medieval times that were awarded by the bishops, in that orthodoxy was the criterion. As the nineteenth century progressed, so the universities shrugged off some of their outworn functions, and became primarily the preserves of intellectual rather than religious groups.

The House of Commons had agreed to open the universities to persons of all denominations in 1834, but the Bill was lost in the House of Lords. There were further moves in 1835, 1843 and 1851.[4] The Oxford University Act of 1854 abolished the 'test' at matriculation, while the Cambridge University Act of 1856 freed graduating M.A.s as well as B.A.s from such restrictions. The struggle for power associated with the oaths taken at these examinations is implied clearly in the Earl of Derby's speech on the Second Reading of the 1854 Bill.[5] He said:

'. . . I never will sacrifice the inestimable advantage of having the two universities of Oxford and Cambridge as nurseries of the Church of England. . . . I call upon

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[1] *Royal Commission Report on the Universities of Oxford and Cambridge* (C.–856), 1874.

[2] A. I. Tillyard: op. cit. pp. 198–232.

[3] *Statutes for the University of Cambridge and for the Colleges within it*, 1883, pp. 44–49.

[4] A. I. Tillyard: op. cit. pp. 198–99.

[5] *Parliamentary Debates*, CXXXIV, Sections 1238–9, 6 July 1854.

Her Majesty's Ministers to declare that the Bill will not give to any Dissenter any control, power or authority, over the discipline, teaching or government of the University.'

A series of debates in the Houses of Parliament in the 1860s culminated in the University Tests Act of 1871 which opened the universities to those of all religious persuasions whether as pupils, teachers or officers. Only Doctors of Divinity were required to show their allegiance to the Church of England for a few more years.[1]

Mark Pattison, the Rector of Lincoln College, Oxford, had long been connected with university reform, and his *Suggestions on Academical Organization with especial reference to Oxford*, which he brought out in 1868, serves to rehearse many of the points which were being discussed at the time. He made several proposals which do not directly concern this study: of organization into faculties, with colleges subservient to the University, for example. His observations on the use of examinations as administrative weapons are more to the point. He considered the ways in which a university's income might best be distributed.[2] The great bulk of the income was, he wrote, laid out in subsidizing education in the shape of scholarships, exhibitions to students, and fellowships to graduates. He demonstrated that the money might be allotted on three quite distinct principles. It might be given as prizes for merit, and so serve to stimulate hard work and to attract the ablest; it might be given to help poor students, otherwise unable to pay for their education; it might be used to stimulate a demand for one particular kind of education, say, for classics or mathematics. Pattison showed that, since 1854, open scholarships had multiplied. Indeed he complained that 'the market was glutted', and that the scholars, usually wealthy already, were given more than enough for their needs. This 'prize money' had given a great fillip to learning in the last decade, having encouraged talent but not increased the numbers very much. He noticed the danger that comes with the examination system, and wrote that 'a youth comes up with a varnish of accomplishment beyond his real powers' because of the cramming that accompanied it. Pattison wanted fewer scholarships, and of less money-value, but organized by university boards of examiners in each subject, these to be composed in equal parts of professors and nominees of the Vice-Chancellor.[3]

Exhibitions had sometimes been suggested as a suitable device to attract poorer students, but Pattison felt that it would be more effective to try to attack poverty at the roots, and in other ways. In those days it was difficult to assess poverty at all reliably: a reserve fund in each college was possibly a partial remedy. 'The ordinances of the Commission of 1854', wrote Pattison, 'converted the fellowships into sinecures. The Commissioners found an enormous abuse existing illegally, and they legalized it.' Pattison wished to arrange for a graded system of promotion within college and university which would give a graduate incentive to make the best of himself. The third principle on which scholarships might be awarded was that of encouraging certain academic subjects, a matter close to Pattison's 'German' idea of a university, with education under professors in faculties. Clearly, any subjects could be encouraged to almost any degree merely by providing suitable scholarships. The potential university scholar did, in fact, have a fairly wide range of subjects from which to choose by the early twentieth century.

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[1] A. I. Tillyard: op. cit. pp. 202–4.

[2] M. Pattison: op. cit. p. 57.

[3] Ibid. p. 66.

Pattison had strong words to say about the Oxford degree examinations, for 'pass' men in his time comprised as many as seventy per cent of the total numbers taking degrees. He felt that honours students were the only ones undergoing any educational process at a university level, and that men incapable of following such courses should be excluded. While three-year residence should result in an M.A. (not a B.A.), a voluntary examination outside the university, taken at the age of eighteen, should be sufficient to cater for the sort of person who had previously taken a 'poll' degree. The existing examinations were said to dominate the curriculum, but Pattison felt that the general raising of tone likely to be brought about by his proposals would reverse this situation. Professor Goldwin Smith, another university reformer of somewhat different views, agreed that pass degrees should be abolished and that the University should organize the entrance examination.[1]

The question of whether a student at a university should follow a general or a professional course has frequently provoked discussion. Pattison stood for a firm general basis to be followed by a more specialized course organized by one of his proposed 'faculties'. General education should terminate at Oxford with 'Moderations', usually after one year, rather in the manner of Keele in later years, except that the basis of education at the earlier date was assumed to be classical. After this a student should commence his special studies in such subjects as medicine, theology, natural philosophy or civil engineering.

Many of Pattison's recommendations came to be realized with the passage of time, for they were a mixture of down-to-earth criticism of immediate utility as well as imaginative idealism. His writings served to underline the principles, rather as Hamilton's had done earlier.

5. SOME EFFECTS OF THE EXAMINATION REFORMS

The faith which was placed in examinations by the Victorians is well known and needs little testimony. The Oxford University Commissioners of 1850 could claim that, 'the examinations have become the chief instruments, not only for testing the proficiency of students, but also for stimulating and directing the studies of the place.'[2] They went on to say that the standards of ordinary as well as of honours students were being raised, but that a certain narrowness of approach was apparent. The same views prevailed at Cambridge, where it was said that the examinations were 'the great instruments of public teaching' and that many changes in the subject or method of the studies had to be introduced by these means.[3] There was probably a connection between the growth of examinations and the degree to which the university flourished. Matriculants at Cambridge increased in number from 129 in 1800, to 427 in 1820, and to 1,191 in 1910.[4]

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[1] Goldwin Smith: *Reorganization of the University of Oxford*, 1868, p. 35.

[2] O.U.C. Report, 1852, p. 61.

[3] C.U.C. Report, 1852, Evidence, p. 222.

[4] *The Historical Register of the University of Cambridge to the Year 1910*, pp. 989–90.

The methods of examining developed in the honours courses had an immense influence on national life, for many other systems came to be based upon them. The extent to which the reformed university scholarships of the nineteenth century helped to put the public and endowed schools on their feet, by giving their pupils something to aim at academically, has been shown elsewhere.[1] The modern university scholarship system at Oxford and Cambridge had largely crystallized soon after 1850, and its success in attracting the ablest students in the country was an important factor in maintaining the intellectual supremacy of the ancient universities. The examinations for entrance to public schools at the age of thirteen also reached a fantastically high standard. The Rugby School Scholarship Examination of June 1899, contained algebra questions roughly of modern G.C.E. Advanced level standard. Marlborough, Eton, Rossall and Winchester were equally demanding.[2] Such were the results of competition in raising standards, at least for the few. Competition at the top could help to leaven the lump. It was said that the preparatory school curriculum was the direct outcome of the entrance scholarship system at the public schools.[3]

The contestants took their work seriously. John Newman, who later became a cardinal, entered Trinity College, Oxford, in 1817, and won a scholarship. He could write, 'Give me no honours here if they are to be the slightest cause of sin to my soul'.[4] Recovering from a disastrous 'lower second' resulting from overwork in the honours competition, he won an Oriel College fellowship in 1822. Oriel was remarkable because it ignored the written examinations which were becoming fashionable for open competitive fellowships. In academic work generally, the universities were firmly in the grip of examinations.

The introduction of the 'Oxford University Locals' in 1858 really marked the beginning of large-scale public examining in secondary schools. It was only natural at that time that such a system should be left in the hands of Oxford and Cambridge, for they alone had accumulated sufficient authority and expertise. The principle behind this examination was no less competitive at first, but a fuller treatment will be given in a later chapter. As to competition, there would be few nowadays who would agree with the extreme views expressed by Lord Powis in the 1860s, who objected to men being examined in different papers. He wished to have men pitted against each other in one common, classical examination, for the purpose of assessing their rank order, as in an athletic competition. A choice of papers would have made this difficult.[5] This was, of course, going right against the diversification of studies which was taking place at the time. It assumed, by implication, the well-known definition of education as that which is left behind when one has forgotten everything one learnt at school. Competition in educational matters was not always, apparently, regarded as a necessary evil, but as the aim and purpose.

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[1] T. J. A. Smith: Some Aspects of Examinations, 1800–1858. (Southampton M. A. Thesis, 1957.)

[2] C. C. Lynam: *Examinations for Entrance Scholarships at the Public Schools.* Board of Education. Special Reports on Educational Subjects (Cd. 418), Vol. 6, 1900, pp. 107–186.

[3] G. Gidley Robinson: *The Preparatory School Curriculum.* Board of Education. Special Reports on Educational Subjects, (Cd. 418), Vol. 6, 1900, p. 61.

[4] L. Bouyer: *Newman, his Life and Spirituality*, 1958, pp. 48–54.

[5] *The Pall Mall Gazette*, 21 November 1867.

It has been shown briefly how the system of competitive examinations was grafted on to an earlier system at the two ancient universities. It would be wrong to assume that the growth of competitive examinations in these institutions was an isolated phenomenon. The Jesuits had adopted a policy of education, based upon the scholastic method, that was characterized by frequent exercises in which competition with one's fellows was the driving force.[1] These teachers were, until the first half of the eighteenth century at least, preeminent in training their pupils. Again, the body which was later to become the Royal Society of Arts, and which was founded in 1754, encouraged ingenuity and industry in the artisan class by awarding prizes and premiums. This work began in its earliest days and is still continued, with examinations and prize competitions.[2]

The following chapter will show how the principle of competitive examination was adopted by the State for its own purpose. Competitive methods were spread throughout public organizations by the waves of young men leaving Oxford and Cambridge with high qualifications. When an important public post was to be filled in the nineteenth century, such as that of a training college principal, one of the most important conditions was that a Cambridge 'wrangler' or an Oxford 'first' should be sought.[3] The honours degree was a first step to success in public life. Ralph (later Lord) Lingen, who was Secretary at the Education Office between 1849 and 1869, had won a 'first' in classics at Oxford.[4] Robert Lowe, who was equally influential, did likewise, while William Ewart Gladstone managed a 'double first'. Many of the young men leaving the university with honours entered politics or the Civil Service, while many more entered the Church and were thus placed in a position to influence the national system of education which was slowly being established.

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[1] R. Schwickerath: *Jesuit Education*, 1903, pp. 511 ff.

[2] See Chapter 4.

[3] *Report of the Committee of Council on Education*, 1890–1, pp. 422–23.

[4] The Honours Register of the University of Oxford, 1883.

CHAPTER TWO

The State and Competitive Examinations

1. THE RADICAL APPROACH

The custom of using competitive examinations gathered strength at Oxford and Cambridge in the nineteenth century; the two universities gained prestige, and their methods became popular. Robert Lowe's career may serve to symbolize the way in which competitive examinations spread over the country from Oxford. Lowe was a remarkably successful product of the Oxford University examination system, gaining a 'first' in classics and just missing one in mathematics; later he became one of the ablest private tutors in the University.[1] It will be shown how great a part he had to play in public life afterwards, in introducing competitive examinations into Indian Civil Service selection, and in promoting the system of 'payment by results' in elementary schools, with all its overtones of competition, cheapness and efficiency.

The universities not only produced graduates who perpetuated their ideas of examining, but they also affected secondary schools consciously and directly by establishing 'local examining bodies'. The entry of the ancient universities into the educational world beyond their walls was to have a wide effect, but the influence of Oxford and Cambridge was not the only factor affecting the examination systems that were to spring up. There had long been a demand that the servants of the State should be selected by merit. This idea was often put into practice by university men such as Lowe, but it did not originate with them. The universities were socially conservative, on the whole, and seed-beds of the 'Establishment'. The rising middle classes were calling for reform, and selection by merit was their radical remedy, conceived in the eighteenth century and put into practice in England towards the middle of the nineteenth century.

The slogan '*la carrière ouverte aux talents*' was one which mirrored many of the political ideals of radical thought in eighteenth-century France. Such an aim was beyond the scope of action in France of such a man as Turgot, though probably not beyond his imagination. Turgot, an eminent politician, wrote an article in the *Encyclopédie* in 1756 on *Fondations*, in which he attacked permanently-endowed establishments because they became outdated, and tended to generate unreasonable vested interests. He compared these foundations unfavourably with the British voluntary societies which were already numerous when the article was written. In attacking the French equivalent of an English endowed school he said:

'You wish to perfect education – propose a prize for the emulation of parents and children, but let these prizes be offered to whomsoever can merit them, offered at least to every order of citizens; let employments and places become the recompense of merit and the sure prospect of work, and you will see emulation struck up at once into the heart of all families.'[1]

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[1] A. P. Martin: *Life and Letters of . . . Robert Lowe . . .* 1893, Vol. 1, pp. 92 ff.

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Unfortunately Turgot fell from power before he could put his radical ideas into practice on a large scale, and it was left to the revolutionaries and their successors to implement such schemes.

While Turgot's writings served to define enlightened French views of competition in education, his contemporary, Chalotais, was the best-known advocate of state education in that period. Writing at a time when there was a move against the Jesuits, and towards secular instruction, he felt that

'. . . *toute Nation a un droit inaliénable et imprescriptible d'instruire ses membres; parce qu'enfin les enfans de l'Etat doivent être élevés par des membres de l'Etat.*'[2]

Others, such as Rolland and Turgot also demanded state action, and may be considered forerunners of the revolutionaries and of Napoleon I in reforming education. The French educational machine soon began to move headlong on its course towards central state-control, with universal, compulsory, free, and secular education, while neighbouring countries rocked violently with the motion of its progress.

English and French Radicals had many ties at first. One has only to remember that Bentham's advanced ideas gained him French citizenship in 1792 to gain an impression of the closeness.[3] There were links before Bentham's time, however. Adam Smith was a British contemporary of Turgot and, indeed, the two met in Paris in the 1760s in the company of a group of intellectuals known as the 'Physiocrats' or '*Economistes*'.[4] Adam Smith's masterpiece *The Wealth of Nations* hinted at the desirability of some very limited public examination for the children of workers. The type of school envisaged in the book was similar to a Scottish parochial school or an English charity school of the period. Adam Smith's views are interesting in that they show how a national form of organization was felt to be necessary while, at the same time, government interference was suspected. Adam Smith bypassed this issue, which was not a major one in his work, by calling for support by 'public bodies', vaguely defined.[5] He realized that it was in the common interest to have educated workers, and proposed that some form of competition should be arranged, with small prizes or badges for the ablest pupils. He also proposed that a man be debarred from entering into trade without passing a test of competency in basic education, or undergoing probation.

Adam Smith was too stout a defender of the need for fostering self-interest to suggest having a fully state-supported school. He would probably have argued that a teacher's incentive was lacking without payment by the parents, and that public support should therefore be limited. At the same time, he felt that only the State was capable of carrying out such reforms as he envisaged, vital as they were to the State's wellbeing. The dilemma hinted at in *The Wealth of Nations* became one to which later Radicals had to devote much thought. In short, while a *laissez-faire* policy of non-interference was considered the best, some form of state supervision was often necessary to enable a competitive society to operate freely.

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[1] W. W. Stephens (ed.): *The Life and Writings of Turgot, Comptroller-General of France, 1774–76*, 1895, p. 225.

[2] Caradeuc de la Chalotais: *Essai d'Education Nationale, ou Plan d'Etudes pour la Jeunesse*, 1763, p. 20.

[3] C. M. Atkinson: *Jeremy Bentham*, 1905, p. 100.

[4] Adam Smith: *The Wealth of Nations*, Everyman edn; Introduction by E. R. A. Seligman, Vol. I, p. vi.

[5] Ibid. Vol. II, Book 5, Chapter I, p. 267.

Jeremy Bentham's recipe was one which may appear bizarre to modern eyes, but it contained the kernel of the methods that were to prevail for many decades and which were still evident in the twentieth century. The idea can be best described as one of the State 'holding the ring' to permit the free competition of individuals; it relied on Bentham's opinion that every man was the best judge of his own interests, and that it was to the public advantage that he sought to further them. This axiom might be applied to seeking appointments or to any of the manifold occupations of life. Bentham laid out his proposals for a system of Civil Service examinations in 1827.[1] With a characteristic passion for detail he developed a mechanical system for impartial examining. Certain questions only were to be asked of candidates, and these were to be published beforehand, with one question book to each subject. Questions were to be selected by lottery in which the possibility of fraud was to be diminished by using the services of a very young child. The State was to organize the whole system, for it was proposed to establish an 'Examination Judiciary' under a 'Minister of Justice'. The examinations were to be oral and public. Those passing the first part of the examination were to submit sealed tenders, stating the salary for which they were prepared to sell their services; the appointment was to be awarded to the person with the lowest tender. In this way Bentham determined to weld state oversight and individual competition into a just piece of social machinery.

It is easy to laugh at such a strange system, especially as it was described in what can only be termed Benthamite jargon; but it has to be remembered that there were no precedents for Bentham to follow, or rather, few that he could apply. It should also be borne in mind that modern English examinations are often somewhat stereotyped, with their two- to three-hour examination papers and a notification of results which generally arrives in the middle of the summer vacation. An Englishman expects an examination of a certain type. Curiously, some modern Russian examinations have strong similarities to the proposed Benthamite system, with the exception of the tenders. David Granick described an examination which he had seen at a Russian university which relied to some extent on lottery; there were questions available on the whole course, and the answers were given orally and, in a sense, publicly.[2] Essentially the questions were on general topics. The examiner asked a few pertinent questions and the student disgorged all possible information. While, then, Bentham's suggested methods, based as they were on an inadequate understanding of psychology, seem unrealistic and mechanical, they may have been workable to an extent that modern English conventions have rendered it difficult to understand. The main importance of Bentham's theorizing was that he gained disciples who utilized some of his principles and put them into practice, without necessarily attending to the plethora of detail which hid the structure of the original work.

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[1] J. Bentham: *Constitutional Code*, 1827. See J. Bowring: *The Works of Jeremy Bentham*, 1843, Vol. IX, pp. 273 ff.

[2] D. Granick: *The Red Executive*, 1960, pp. 77–80.

2. THE CIVIL SERVICE REFORMS

Bentham was in sympathy at once with the eighteenth-century theorists such as Adam Smith and the French of his younger days and with the Victorians who succeeded him. Of these, mention might be made of Edwin Chadwick, the sanitary reformer and Poor Law Commissioner, who had been Bentham's literary assistant and had received a legacy from him.[1] John Stuart Mill, too, was a frequent visitor to Bentham's home as a young man, and Mill was later to become the important 'Examiner of India Correspondence' in the India Office as well as an influential writer.[2] A host of others were to assist in the spreading of Bentham's views, in the extension of his theories, and in their application to important problems. There scarcely existed an aspect of government that had not been radically changed by the end of the century, for Liberal ideas owed much to this Radical philosopher. In particular, Edwin Chadwick, writing in 1885, could refer to the 'eminently practical success of the Indian Civil Code drawn up on [Bentham's] lines'.[3] Radical ideas diffused slowly but surely throughout England in the face of Conservative opinion, and Bentham's formed no exception to this rule. His Constitutional Code was published in 1827, and a concrete step towards an impartially selected Civil Service came only with the India Bill of 1853.[4] Even this was merely a beginning, for it was not until the closing decades of the century that the principles of selection were effectively altered in the Home Civil Service.

This is not to suggest, however, that Radical ideas had a slow or a slight effect; rather the reverse was true. A whole nation had to be induced to accept ideas that were foreign to it, and which were finally to change the very nature of its own structure. The achievement of an impartially and competitively selected executive to replace one whose selection had depended on patronage and influence can justly be described as social surgery. The growing industrialization, the rise in power of the middle classes and the gradual enfranchisement of the people form part of the backcloth of the nineteenth-century scene; for present purposes it will prove politic to place the Civil Service reforms downstage. It should be borne in mind that these particular reforms both reflected public opinion and were likely to set the trends as well. It was not to be so very long before the selection procedures in commercial or industrial concerns of any size were to be influenced by the methods of the Civil Service, as the advantages of attracting the ablest available recruits became apparent.[1] The reform of the Civil Service was to turn largely on the application of competitive examinations, and is one of the most direct examples of their use in achieving a certain policy. When the impartiality of the Civil Service and the competency of its individual members are rarely questioned, it is worthwhile listening to J. S. Mill's opinion. He stated that 'throwing open the Civil Service to competition was one of the greatest improvements in public affairs ever proposed by a government.'[2]

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[1] 'Edwin Chadwick,' *Dictionary of National Biography*.

[2] R. Borchard: *John Stuart Mill the Man*, 1957, p. 121.

[3] E. Chadwick: *The Evils of Disunity in Central and Local Administration especially with relation to the metropolis, and also on the New Centralisation for the People* . . . 1885. Note to p. 2.

[4] Bill for the Government of India, 1853, sections 32–40.

The problems of the individual within the State loomed large in the nineteenth century when the business of government was necessarily increasing and coming into conflict with private interests. The difficulties of having individual liberty with state control have already been mentioned. One of the fruits of Victorian preoccupation with this subject was J. S. Mill's work *On Liberty*, published in 1859. He knew the dangers of having a powerful bureaucracy, and cited Russia as an example of a country in which bureaucrats were able to act in such a way as to stifle legislation which was distasteful to them as a class.[3] An important problem in the England of his day was to secure the efficient execution of policies by competent and impartial officers. The executive was growing rapidly in numbers as the business of government expanded, and it was important to Mill that the principles of selection should be elucidated.

The reform of the public service by competitive examination may be said to have begun with the India Bill of 1853, in which Robert Lowe, then beginning his official career as one of the Secretaries of the Board of Control at the India Office, had procured the insertion of a suitable clause.[4] It was coming to be realized that responsibility was required of those ruling a country the size of India. Thomas Babington Macaulay stated the case succinctly in a debate in the House of Commons, saying that when a country of one hundred and twenty million people is governed by only eight hundred Europeans one cannot afford to have any one of those eight hundred below a reasonable level of ability.[5] From 1854 onwards, men entering the Indian Service, whether as soldiers or as civilians, were to be screened by examination. The Board of Control was enabled to appoint examiners, both for the civilian and military colleges at Haileybury and Addiscombe respectively, and for testing other entrants to the service such as assistant surgeons. The examination system established in this way was soon to entrench itself; powers to nominate or appoint candidates were firmly dismissed.

In the November of the same year, Stafford Northcote and Sir Charles Trevelyan produced a report, at Gladstone's request, recommending that the public service generally be opened up by competitive examination.[6] At that time, civil employment under the Crown was largely a matter of patronage, though in certain offices nominees were partially tested by a qualifying examination and by periods

[1] *The Year Book of Technical Education and Careers in Industry*, 1964, pp. 1157–1224.

[2] J. Morley: *The Life of William Ewart Gladstone*, 1903, Vol. I, p. 379.

[3] J. S. Mill: *On Liberty*, 1859, p. 66.

[4] A. P. Martin: op. cit. Vol. II, p. 421.

[5] *Parliamentary Debates*, CXXVIII, 24 June 1853, cols. 755–6.

[6] *Report on the Organization of the Permanent Civil Service, together with a letter from the Rev. B. Jowett* (Cd. 1713), 1854.

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of probation.[1] The existing methods were not without their protagonists, for some suspected that republicanism might be introduced by such a proposal, or that loyalty to the proposed central board might come to replace loyalty to the Queen. The advantages of associating the aristocracy with the public service were explained at length, while, on the other hand, it was argued that there was a danger of public school leavers carrying all before them in competitive examinations.[2] More important reasons than these were the interests of those politicians with places at their disposal, and at another level, the interests of the civil servants themselves, who looked to steady promotion by seniority, rather than by ability, as their sole bulwark against favouritism. It was probably the administrative shortcomings of the Army and the Civil Service at the time of the Crimean War, of 1854–56, that strengthened Gladstone's determination to effect some sort of change.

Gladstone had proposed to Benjamin Jowett, of Balliol College, and Frederick Temple (later Archbishop of Canterbury), both Oxford men and well-known 'reformers', that they should take the salaried office of 'examiners' under a new scheme for the Civil Service.[3] He was unsuccessful in achieving this aim, but the fact that they were asked gives further evidence of the closeness between reform nationally and reform in Oxford.

The Northcote and Trevelyan Report was the culmination of a great deal of earlier work. G. A. Campbell has shown the magnitude of the debt owed to Sir Charles Trevelyan for his part in reorganizing the Civil Service.[4] Trevelyan had given considerable thought to the matter, and his signature was to be found at the end of most of the preliminary reports on individual departments.[5] In all of these papers the need was emphasized of having competitive entry and promotion.[6] The whole trend was summed up in the final Northcote and Trevelyan Report referred to above. Northcote had been Gladstone's private secretary for some years; Trevelyan had married Macaulay's sister, and Macaulay's name has already been mentioned in connection with the Indian Civil Service. Macaulay, himself, had won an open fellowship by competitive examination at Trinity College, Cambridge.[7] The links between the reforming parties were close.

Northcote and Trevelyan showed that the light work in the Civil Service, coupled with promotion by seniority, failed to attract the ablest youths. The lack of competition was further exaggerated by the fragmentary nature of the organization, for it was uncommon to gain promotion by changing to another department. The general principle recommended was that candidates should be carefully selected on entry and should be

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[1] Sir G. W. Kekewich described in later life how he was appointed 'Examiner' in the Education Office, largely through the patronage of Sir Stafford Northcote. See G. W. Kekewich: *The Education Department and After*, 1920, pp. 3–30.

[2] For a vivid account of some currently held views, see *Parliamentary Debates*, CXXXVIII, 15 June 1855, cols. 2040–2133.

[3] J. Morley: op. cit. Vol. 1, p. 381.

[4] G. A. Campbell: *The Civil Service in Britain*, 1955, pp. 22–28.

[5] These were collected and published as *Reports of Committees of Inquiry into Public Offices and Papers connected therewith*, (Cd. 1715), 1854.

[6] See, for example, the *Report on the Colonial Office*, Paper 1715, pp. 49 ff., which stated that there was no entry examination, that there was no promotion by merit, in fact, though this existed in theory. It was stated (p. 54) that there had been promotion by merit at India House since 1831.

[7] M. Pattison: Life of Macaulay, *Biographies of Lord Macaulay*, 27th edn., 1905, p. 240.

> '. . . employed from the first upon work suited to their capacities and their education, and should be made constantly to feel that their promotion and future prospects depend entirely on the industry and ability with which they discharge their duties.'[1]

The Report went on to say that the first step was the establishment of a proper system of examinations before appointment, to be followed by a period of probation in the traditional way. It was found that there were already examinations for entry into many of the more important departments, the Treasury and the Privy Council office, for instance. These examinations varied in character and in rigour of application, and a central examination system was warmly advocated. In the past, departmental heads had regarded examining as a very minor duty; they lacked time in which to supervise selection properly, and they could easily be biased. It was recommended that a Central Board of Examiners be constituted, to include or to obtain the services of persons, 'experienced in the education of the youth of the upper and middle classes'.[2]

The examination felt to be most suitable was described as a 'competing literary examination', with some previous inquiry into the character of the applicants. It had often been argued that examinations were no test of the character or morals of a candidate, though Jowett, among others, strongly contested this assertion on the grounds of experience.[3] A wide curriculum was deemed necessary to cater for entrants of all types, and it was felt that this would 'quicken the progress of our universities more than any legislative measures could do'.[4] Jowett agreed with this in his letter at the end of the Report.[5] He went further and proposed four 'schools', in any two of which candidates should be examined. These four schools resembled the four schools of the 1850 Oxford Examination Statute, showing how closely Oxford affected, or tended to affect the public service.

The main Report called for a Central Board of Examiners but with local examination centres throughout the country. The methods of the Education Department of the Privy Council Office were mentioned, by which the papers of candidates all over the country were sent in to a central office, sorted by subjects and sent out to different inspectors for marking before final assessment. This modern method of organizing examinations was presumably the first of its kind in the country, for it dealt with schoolmasters and pupil-teachers in the mass although they were dispersed over the face of the countryside. The arrangement was facilitated by the introduction of the penny post in 1840.[6] It was suggested that records of individual careers should be kept to help promotion by merit, and this had already been tried in the Commissariat Department for some years.[1] The proposed Examination Department would have been in a position to administer such a scheme. It was felt that an Act of Parliament would be necessary to cut through tradition, but this was not to be, and it took nearly twenty years for the Northcote and Trevelyan Report to be implemented fully.

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[1] Cd. 1713, p. 9.
[2] Ibid. pp. 10–11.
[3] Ibid. p. 24.
[4] Ibid. p. 14.
[5] Ibid. p. 31.
[6] Board of Education. *Report of the Consultative Committee on Examinations in Secondary Schools* (Cd. 6004), 1911, p. 11.

Before going on to consider how progress was made to achieve the proposals, it will prove expedient to look at some of Jowett's comments, for he had read the Report in draft and had been asked to give his opinion. He felt that the likely grounds for objection to the Report were that it would be impossible to assess a candidate's morals by a competing literary examination, and that it would be impossible to examine and compare in such a variety of subjects.[2]

As to the first objection, his experience enabled him to reject it, for perseverance and self-discipline were vital for success in examinations. To avoid any bad choice, however, he advised a careful use of testimonials, drawing an analogy with insurance enquiries. He rejected the second objection, also, for a variety of subjects was needed if the competition was to be truly open, and he also mentioned the success of the Education Department of the Privy Council in facing a similar problem of organization.

Jowett felt equally strongly about the effects of the proposed scheme on the education of the lower classes. He wrote that ' a smile may be raised at the idea of subjecting excisemen and tide-waiters to a competing literary examination as there might have been thirty years ago at subjecting village schoolmasters to a similar test'.[3] He felt that examinations at a lower level would exercise the happiest influence on the education of the lowest classes throughout England, 'acting by the surest of all motives: the desire that a man has of bettering himself'.

The first move to put the Northcote and Trevelyan plans into operation came almost immediately after the publication of the Report, in the year 1855. Palmerston then established a Civil Service Commission by Order in Council, for there was public concern over administrative inefficiency in the Crimean War, and a limited system of examinations was to be established to reduce some of the most glaring deficiencies of the organization.[4] The Commission was to operate an examining board, acting more or less as an agent for the divers departments. Some of the ideas of the 1853 Report were adopted: that of having a central board, for example, and of removing some of the weight of selection from the shoulders of departmental heads. The principal aim of the reformers was brought to nought by a clause which prevented the examining board from making any alteration in the system of nomination or appointment of candidates.[5] But the examining office took part of the business of selecting candidates out of the hands of the individual departments, and expanded itself as it did this, tending to set the norms (in suggesting entry ages, for example) and acting as a meeting place for heads of departments with common problems.[6] The annual reports of the Commissioners showed how, from the first, a certain limited form of competition was encouraged, even though the bulk of the candidates were not subjected to it.

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[1] Cd. 1713, p. 20.
[2] Ibid. p. 24.
[3] Ibid. p. 30.
[4] *First Report of Her Majesty's Civil Service Commissioners* (Cd. 2038), 1856, p. iii. Order of Her Majesty in Council regulating the admission of Persons to the Civil Service of the Crown, 21 May 1855.
[5] Ibid. p. iv.
[6] Cd. 2038, p. v.

The Commission's Second Report gave some useful statistics and comments upon them. Thus 29.5 per cent of nominated candidates were rejected in 1855, and 38.8 per cent in the following year.[1] These were the results in the non-competitive examinations, but there were also results from 34 competitive examinations in which 222 candidates had competed for 61 places where high intellectual proficiency was demanded. The numbers involved in competitive examinations were small, and these examinations were arranged privately for such departments as required them. There is an account of an examination carried out in the Commission's own office for one senior and three junior clerkships. The fact that the competition was not made public but 'was communicated to one or two heads of schools and colleges and mentioned casually to other persons at various times' may sound a little strange, but perhaps the Department could scarcely advertize its own feelings about open competition too widely, as the matter was a controversial one, and the Department's authority was limited. The examination described may be considered an experiment, and a successful one at that.[2] Of 44 examined, almost all were university or public school men; an important point, this, at a time when opponents of open competition were forecasting lowered social standards from the new type of entrants that it was proposed should join the service. One of the winning candidates had been a Cambridge 'wrangler', and the others had reached a high standard, serving to nullify a second argument that only second-raters would apply for such posts. The Commissioners concluded that competitive examinations were potentially very useful, though limited at that time by the small numbers of people included in each test; the emphasis in all of the annual reports was towards the advantage of full competition, and this was ultimately achieved by gentle propaganda and by example.

The marking of papers, and presumably the setting of standards as well, was carried out by 'assistant examiners' of whom two were 'continuous' and the remainder were 'occasional'. With the exception of certain foreigners who were employed for marking the language papers, and of the odd naval or military man who dealt with technical matters, all of the assistant examiners were Oxford or Cambridge men.[3] Doubtless, academic success at one of these universities was the hallmark of an educated man at this time, and it was significant that the ablest graduates tended to serve as evangelists for the system of competitive examinations. It can be surmised that the opinion of such a body of men would be strongly in favour of competitive examinations, and that they would take every opportunity to broadcast the system which had given them success themselves. At the least, this is further evidence of the close links between reform by examination at Oxford and Cambridge, and in the outside world.

A passage in the First Report shows one side-effect of the formation of a Civi Service examining body.[4] It was felt that handwriting was of too low a standard, and that a higher standard should be demanded of entrants. R. R. W. Lingen of the

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[1] *Second Report of Her Majesty's Civil Service Commissioners* (Cd. 2171), 1857, pp. xiii–xiv.

[2] Ibid. pp. xv–xvii.

[3] Ibid. pp. xi–xii.

[4] Cd. 2038, p. xix.

Committee of Council of Education had asked in a letter that 'the handwriting should be rapid, neat, and of that even stroke which allows legible copies to be taken by pressing'. This, surely, was the birth of the 'Civil Service hand' that was to dominate penmanship for decades, and which was finally to become almost universal. The Report stated that they intended to improve the standard 'as the need becomes publicly known'. This serves as an example, though a minor one, of the way in which certain policies could be conveniently applied by an examination system.

The general principles of Civil Service examinations were laid down in the Second Report.[1] The ordinary examinations were to serve the twofold purpose of ascertaining the fitness of the candidate for actual duty and of testing his education and intelligence generally. For the first purpose entrants were tested in writing, orthography and arithmetic; for the second, the accent was on English history and geography, with a literary bias. The Commissioners contrived to build up a sense of independence by insisting on the right of 'exercising an independent judgment upon the performances of the candidate, without the review of any external authority'. The examinations were extended year by year but, although a limited form of competition became almost universal in 1860, it was not until 1870 that there was a wider reform.

The Civil Service Commissioners had become sufficiently well established by 1859 to be able to begin taking over examining functions from the India Office. They first issued Regulations for this Department in 1859, and the state of competition in Indian affairs compared remarkably with that in the Home Civil Service. There were, altogether, 1,179 competitors for 259 situations in 1859, but, of these, 391 were competing for nine writerships in the India Office.[2] In addition to this, and to make the comparison greater, it should be noted that few of the Home examinations were truly competitive, as many of the unsuccessful candidates for specific posts were deemed to have reached such a standard that they might receive certificates of competence which qualified them for employment later, or in other departments. There were forty places available in the Indian Civil Service in 1859, distinct from the writerships, and candidates for these posts, too, were now to be selected by the Civil Service Commissioners, though separately from Home Civil Service candidates in general.

The Commissioners took over the entrance examinations for the military establishments at Sandhurst and Woolwich in 1870.[3] The Duke of Wellington was still alive when a qualifying test for entry into the Army was initiated in 1849, but only in 1857 was the examination organized properly, by the newly-established Council for Military Education.[4] The standards of entry were very low at the time of the Indian Mutiny, as great numbers of officers were required. The First Report of the Council of Military Education showed how the educational establishments were being altered to meet the current needs. Sandhurst was developing two facets: the

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[1] Cd. 2171, 1857, pp. iii–xii.

[2] *Fifth Report of Her Majesty's Civil Service Commissioners* (Cd. 2631), 1860, p. vi.

[3] *Fifteenth Report of Her Majesty's Civil Service Commissioners* (Cd. 197), 1870, p. xv.

[4] *Report of the Commissioners on Military Education* (Cd. 2603), 1860, p. 5.

'staff college' for experienced officers, and the ordinary college for entrants. Woolwich was becoming the centre for practical training, to which able engineer and artillery officers were to proceed. The Council of Military Education felt that the competitive examination which should determine admission to Sandhurst, being based on the ordinary subjects of a liberal education, should greatly assist the general schools of the country.[1] The importance of mathematics to officers was underlined, and doubtless had a widening effect on the curriculum of the schools.[2] It was realized by 1870 that the Army entrance examinations involved no military knowledge, and so the way was open for the Civil Service Commissioners to undertake the examining on behalf of the Army.

Such qualifying examinations as had existed since 1849 were inadequate to the task of keeping out the insufficiently able. Family or political influences were often able to render the tests useless. At their best, such qualifying examinations only ensured a minimum standard, whereas the competitive ones which were to supersede them attempted to select the ablest available young men of their generation. One of the members of the Council of Military Education described the qualification for entry to a direct Army commission as being 'ridiculously low', but recommended wholeheartedly the examinations of Woolwich and of the Indian Civil Service.[3] The one was a 'qualifying' and the others were 'competitive' examinations of the newer type.

An Order in Council of 4 June 1870, ensured that nearly all Civil Service appointments became examinable, while all but a few branches were thrown open to competition.[4] There had been resistance from some members of the Cabinet to such a change, and, in effect, open competition was permitted only where the Head of the Department was in favour of it. The change affected most departments in practice, the Foreign Office being conspicuously against the move.[5] Robert Lowe was then Chancellor of the Exchequer and he was decidedly in favour of competitive examinations; at the same time, many of the earlier objections to competitive entrance were being shown to be groundless. Gladstone's own feelings about the unreformed system may be judged from a letter that he sent to Lord John Russell as long ago as 1854. 'At the Revolution', he wrote, 'we passed over from prerogative to patronage and . . . since the Revolution we have also passed from bribery to influence.'[6]

The Civil Service Commissioners had taken over the selection of the Naval and Colonial entrants by 1900, as well as the Military.[7] Nearly 40,000 candidates were examined annually by this time, many of them for the 276 competitive examinations for the Home Civil Service, some of which were for the higher grades where intellectual ability was needed rather than routine skill. A variety of smaller examinations was also held. It was the First World War which struck the deathblow to competitive examinations in the old style for the public service. An Order in Council of 18 December 1918, had temporarily substituted a form of selection on a competitive basis which was to take account of a candidate's military and educational record, together with his special personal qualities.[1] At this stage, between the Wars, personal interviews began to weigh more heavily, and with the introduction of this new principle of selection by interview, organized examination systems entered the modern age.

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[1] *Report of the Commissioners on Military Education* (Cd. 2603), 1860, p. 17.

[2] Ibid. Appendix 1.

[3] *Report of the Schools Inquiry Commission*, 1868 (Taunton Report) Vol. 5, p. 518 (G. W. Dasent).

[4] *Fifteenth Report of Her Majesty's Civil Service Commissioners* (Cd. 197), 1870.

[5] J. Morley: op. cit. Vol. 1, p. 710.

[6] Ibid. Vol. 1, p. 608.

[7] *Forty-fourth Report of Her Majesty's Civil Service Commissioners* (Cd. 271), 1900.

Although competitive examinations for Government service did not come into operation rapidly, they flourished strongly once they were established. They had a tremendous influence on the work of the public and endowed schools according to evidence given in the Royal Commission Reports of 1864 and 1868.[2] The former, the Clarendon Report on the Public Schools, showed that although relatively few entered from these major schools into the Army, nearly all those who went to Woolwich, where there was competitive entry, had to go first to a 'crammer'. These expensive cramming establishments existed to train school leavers to pass examinations to enter their chosen professions, and they were intended to achieve this result and no other. The examinations for the Army and for the Indian Civil Service in particular were affecting the endowed schools also. In some cases the school curriculum was distorted to cater for examination candidates, while in others, boys were leaving school early to attend a 'crammer'.

The Head Master of Marlborough College, described the Indian Civil Service and Woolwich examinations as 'sitting like a blight on education', compelling a master to teach not what was good for the pupils but what 'will pay' in the examination. He showed up the weaknesses of an examination system that was wholly external to the schools, stating that in training a boy for his future occupation a general education was desirable because of the variety of middle-class occupations.[3] Dr Benson, the Head Master of Wellington College, thought that such examinations tended to 'strain the boys and make their knowledge not permanent', but that it was not the element of competition that caused this.[4] He felt that specialization for professional examinations, such as for Medicine or the Army, was tending to ruin the school as a place of general education. 'Boys were thrown', he said, 'entirely into the hands of crammers.' It is clear that the strong dislike felt by many teachers for the examinations was because the system was unsuited to the schools, rather than that the system was competitive. Mark Pattison, the Rector of Lincoln College, Oxford, defined the precise point at which examinations became injurious to a school as that at which 'the school follows the examination, and not the examination the school'.[5] The crux of the matter was that the power to affect the schools was coming to rest in the hands of external bodies, not necessarily in sympathy with the aims of the schools. Naturally, the headmasters liked to feel that they were in full command within their own schools, and if parents required boys to enter specific professions, they felt it unreasonable that the whole school curriculum should be distorted to cater for them. If there had to be external examinations, then a more appropriate examining body was demanded.

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[1] *Sixty-fourth Report of Her Majesty's Civil Service Commissioners* (Cmd. 887), 1920, p. iii.

[2] *Report of the Royal Commission on the Revenues and Management of Certain Colleges and Schools*, 1864 (Clarendon Report).

[3] Taunton Report, Vol. 4, pp. 405–6 (G. G. Bradley).

[4] Ibid. Vol. 4, p. 474.

[5] Ibid. Vol. 5, p. 952.

The range of the middle-class or professional examinations in the mid-nineteenth century was considerable.[1] There was no common examining system, and so the schools were at the mercy of the very varied body of entrance tests to different professions. The effect of the external examinations penetrated deep into the organization of the schools. Thus, Manchester Grammar School, besides having added English and other 'modern' sides to its traditional classical forms, created a special 'Civil Service Form', in 1869, to cater for the demand.[2] The local examining boards of the two ancient universities began to prove more and more popular. These, too, were deliberately intended to influence the schools, but they had the confidence of an ever-increasing number of teachers, and particularly of those who had themselves studied at Oxford or Cambridge.[3]

Little has been mentioned yet of the supporters of the external competitive examinations in their tussle with the teachers. The examiners disagreed with the views of the teachers and claimed that the Woolwich and Indian Civil Service examinations had succeeded in raising the standards of entrants substantially over the years. Thus, G. W. Dasent referred to improved English, and Canon Moseley to a raised standard in mathematics.[4] Both ascribed this to the action of the competitive examinations. Edwin Chadwick, in a paper read to the National Association for the Promotion of Social Science in 1871, stated that the standards within the two Armed Services had been raised socially, intellectually, morally and physically.[5] He admitted that the competitive methods were often attended with evils consequent on excessive mental work, and he recommended the Woolwich device of giving marks for physical exercise. He himself was for competition in practical and scientific subjects, in the use of English and in chemistry, for example. He deplored the excessive reliance placed on literature by the Indian Civil Service examiners and attributed this to the influence of Lord Macaulay, describing literature as 'a great field of cram'.

It should be remembered that while powerful adverse criticism of such examinations came from the public schools, there was another side to the question. The universities, the public schools, and the better-established endowed schools, often educated their pupils almost exclusively in the classics. The new external examinations were demanding competency in other subjects as well. To Edwin Chadwick, however, this was not enough. He cited the new regulations for clerkships in the Indian Civil Service and stated that '. . . the Commissioners . . . have been led to sacrifice their own convictions to the influence of the public schools, and to the heads of the English Universities'.[1]

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[1] T. J. A. Smith: Some Aspects of Examinations, 1800–58. (Southampton M.A. Thesis, 1957.)

[2] A. A. Mumford: *The Manchester Grammar School*, 1919, p. 348.

[3] See Chapter 3.

[4] Taunton Report, Vol. 5, p. 516; Vol. 4, p. 183.

[5] B. W. Richardson: *The Health of Nations; A Review of the Works of Edwin Chadwick*, 1887, pp. 327–40.

The Regulations showed that, while the examinations were, indeed, excessively literary, and weighted in favour of Latin and Greek, more modern subjects were catered for. Thus, while the majority of the candidates would take the papers in the language and literature of Rome or of Greece, at 750 marks each at the maximum, in addition to the papers in English composition, history, and literature at 500 marks each, a minority was enabled to sit the mathematics paper, a difficult one which earned 1,250 marks. A modern language paper could earn a maximum of 375 marks, Arabic 500, and natural science 1,000.[2] The detailed records of the examinations were published annually. They showed that the examinations were at a level well above that of average schoolboys, and that the majority of the most successful competitors were at Oxford or Cambridge. Few of the successful ones attempted mathematics or science papers; the majority went for the English and classical papers, perhaps with an attempt at a modern language. It was, presumably, as difficult then as it was to be later for a man to reach a sufficiently high level in both languages and science, and the language papers were the ones to bring in the most marks. Nevertheless, it was at this time that 'modern sides' were becoming popular at the more progressive schools, and it may be taken for granted that this was partly because of the influence of the Army examinations, if not of the Indian Civil Service examinations. G. W. Dasent's evidence before the Taunton Commission showed that he supported an English, as against a classical curriculum, on educational grounds, holding that an Englishman should be educated in his native language.[3]

It should be emphasized that only the highflyers sat for such tests as the Indian Civil Service examinations; the most difficult of the public competitive examinations were generally won by Oxford or Cambridge graduates, and often these had already carried off prizes at their universities. Less able scholars would enter the milder competition for Home Civil Service places or for entry to the Army. Cardwell's Army Bill of 1871 abolished the purchase of commissions, and soon after this all entrants went first to Sandhurst or Woolwich. To gain entrance, even to the former, it was often necessary to attend a crammer. Hugh Thomas stated that of 330 cadets entering in an average year between 1878 and 1899, 222 had studied at a crammer.[4] Strong competition may have taken place for the Queen's Cadetships (Sandhurst scholarships introduced after 1858), but the examinations for the majority were more in the nature of qualifying than of competitive tests; they were, of course, competitive in principle.

Winston Churchill found Sandhurst entry difficult, passing only at his third attempt in 1894.[5] He was sent to a crammer in the Cromwell Road, to a firm which 'had made a scientific study of the mentality of the Civil Service Commissioners'.

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[1] B. W. Richardson: op. cit., pp. 338–39.

[2] *The Fifteenth Report of Her Majesty's Civil Service Commissioners* (C. 197), 1870. Appendix V, p. 271.

[3] Taunton Report, Vol. 5, pp. 518–22.

[4] H. Thomas: *The Story of Sandhurst*, 1961, p. 151.

[5] W. S. Churchill: *My Early Life, A Roving Commission*, 1930, pp. 42–43.

The country may owe more to its crammers than its educationists might care to admit; the validity of the Commissioners' machinery for selecting leaders is also open to question!

It was in this era of Army and Civil Service examinations that the public and endowed schools began to introduce modern studies, partly to replace the classical ones. It is possible to learn of this innovation by opening almost any school history of the period; the descriptions of 'modern sides', 'commercial sides' or 'English departments', all occur first at this time. Mainly this reflected the demand of the middle classes, who were in favour of a more practical education than the traditional one. Partly it reflected the demands of the professions, of Medicine, Law and the Army, for example, which were made apparent in their entrance examinations. Bristol Grammar School, which reopened in 1848, had facilities for the English, the modern and the learned languages, together with mathematics, geography, history and even science and art.[1] The Perse School at Cambridge opened its 'English Department' or 'Commercial Side' in 1866.[2] Harrow began a 'Modern Side' in 1869, to give an education in mathematics, history, modern languages, science, and a reasonable amount of Latin.[3] Rugby had an Army Class at about this time.[4] Certain schools made a speciality of Army Entrance; Eton, Cheltenham, Wellington and Bedford Grammar School were outstanding in this respect.[5] Others, such as Manchester Grammar School, concentrated on the Civil Service. The numbers involved in the modern streams were not always large, however, and at first the 'modern side' was frequently regarded as the soft option, perhaps for the less able boys. The part played by the various examinations of the Civil Service Commission in accelerating progress towards a modern curriculum has already been mentioned in connection with the Schools Inquiry Commission; it was only a matter of time before a wider variety of subjects than the traditional became not only respectable, but usual.

It would, of course, be false to imply that the influence of the examinations upon the schools was the sole, or even the foremost cause of the modernization of the curriculum. This would be to ignore a general movement in the direction of unshackling schools, of which the Public Schools Act of 1868 was another symptom, to name but one instance. The examination system of the Civil Service Commissioners may not have been used consciously as a weapon to broaden the curriculum, as the new Oxford University examinations were after 1850. Consciously used or not, however, the effect on the schools in practice was to popularize modern studies. It is often difficult to establish the priority of the egg to the chicken, but it is probable that the influence of the external examinations on the secondary schools came a little in advance of internal opinion, certainly in the older-established public or endowed schools. The pity of it was that boys were being taken away from schools early to work under 'crammers'; the examinations were out of touch with the schools.

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[1] C. P. Hill: *The History of Bristol Grammar School*, 1951, p. 79.

[2] J. M. Gray: *A History of the Perse School, Cambridge*, 1921, p. 142.

[3] P. M. H. Bryant: *Harrow*, 1936. p. 83.

[4] C. R. Evers: *Rugby*, 1939, p. 89.

[5] H. Thomas: op. cit. p. 141.

3. EXAMINATIONS AND ELEMENTARY SCHOOLS

It has been suggested that the examinations connected with the Civil Service were a direct application of Bentham's proposals, and therefore in the main line of Radical thought. The honour of arranging the earliest nation-wide state examinations, however, lay with the Education Committee of the Privy Council, which began a system of examinations for teachers and intending teachers soon after 1846. The examinations cannot be claimed as a clear triumph for the Radicals; they were the result of a compromise between the Radicals and the entrenched might of the Church. John Roebuck was one of the foremost in proposing Bentham's views in Parliament, though he overemphasized the part to be played by the State.[1] He suggested Prussia and France as models for England, and protested against anti-Government prejudices which became proportionately more absurd as the Government became increasingly democratic. He called for the establishment of a universal and secular system of primary and technical instruction.[2] In contrast to this, the Churches, and in particular the Church of England, felt that education should be their responsibility, and they distrusted interference.

The provision of schools for children of the working classes kept pace with demand, broadly speaking, before the nineteenth century; such schools were usually connected with the churches, of which there was a sufficiency. There may not have been overmuch demand for education, of course, for society was still relatively static, and poor men 'knew their place'. With the rapid industrialization of the early nineteenth century came desperate and belated demands for better elementary education in the towns, for these had grown so quickly in population that they outstripped the voluntary provision of schools. The population increased in what appeared to Malthus to be geometric progression, and by the early nineteenth century the dangers of allowing it to remain uninstructed were becoming apparent.

Needless to say, Bentham had firm views on the subject of popular education, and he called for a liberal attitude, well in advance of his time. There were other movements to increase the provision of elementary education besides his. If Bentham's ideas could be described as political, Robert Owen's could best be termed social. Owen put his socialist beliefs into practice at the New Lanark Cotton Spinning Mills, and education played an important part in a system that was based on the malleability of human character.[3] More dominant than such novel movements as these, were those connected with the churches. A vast number of societies sprang up in the early part of the century to affect education. Among these, as is well known, were the Society for Bettering the Condition and Increasing the Comforts of the Poor (1796); the Sunday School Union (1803); the Royal Lancasterian Institution (1808); and the National Society (1811).[4] It was in an era of firmly held convictions and violently opposed beliefs that the modern state education system was born. Some men were for central intervention, others distrusted it. Many were for a secular education, but more were against it. Church of England supporters were for the schools of the National Society, and hoped for the lion's share of any Government grant; Nonconformists objected to the idea of publicly-raised money being managed by the Church of England. Add to a hundred other such tensions the fact that many more people were affected by elementary than by secondary or higher education, and the situation at the beginning of the nineteenth century seems at the least, to be confused.

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[1] E. Halévy: *The Growth of Philosophic Radicalism*, 1934, p. 513.

[2] *Parliamentary Debates*, XX, 1833, cols. 141–69.

[3] Robert Owen: *A New View of Society, or Essays on the Principles of the Formation of the Human Character* . . . 1813.

[4] C. Birchenough: *History of Elementary Education in England and Wales from 1800 to the Present Day*, 3rd edn., 1938, pp. 31 ff.

A compromise grew out of this confusion, whereby Government aid was administered through the voluntary societies. Radicals or Liberals tended to look to Government intervention, whatever the shade of their religious belief, though direct action by the State was demanded by only a few.[1] Whitbread's unsuccessful Poor Law Reform Bill of 1807 attempted to give a little free schooling to all by using the administrative apparatus of the vestries and the magistrates; Brougham's Bill of 1820 attempted the same thing, but to no avail. In 1833 Roebuck made proposals in Parliament for a national system of education on a democratic foundation, with school districts under the control of locally elected committees.[2] He did not achieve his object, but it was agreed that something should be done, and it was in this year that elementary education received its first Parliamentary grant of £20,000. There was no special machinery for dispensing the money, which was intended to aid the private subscriptions of the two main voluntary societies in the erection of school houses 'for the education of the children of the poorer classes in Great Britain'.[3] The Treasury had the task of apportioning the money between the National Society and the British and Foreign School Society.

The grant gave encouragement to the voluntary bodies, and this method was continued for six years. There was no Government inspection. It soon became clear that even this central aid was insufficient, and that it was not being administered in the best way. The Central Society of Education was founded in 1836 to put the views of Radicals and Liberals. In its first publication there was a proposal to introduce a completely democratic state system of education, with local as well as central bodies, and having considerable power over endowments.[4] So insistent were such demands becoming that denominational bodies grew alarmed; rallying round, they contrived to have the existing systems modified and improved.

The Queen appointed a Committee of the Privy Council by Order in Council 'to superintend the application of any sums voted by Parliament for the purpose of promoting public education'. The official date of appointment was 10 April 1839, and Dr James Kay (later Kay-Shuttleworth) became the moving spirit, acting as secretary in an office designed to allocate the Parliamentary grant. The Committee began its work smartly by bringing out a Minute dated 11 April.[1] This Minute attempted to initiate a State Training College for students of all religious persuasions. Owen had asked for this as long ago as 1813, but it still did not take long for the plan to founder in the turbulent waters of religious controversy.[2] Certain training colleges were already in existence, notably the Borough Road College of the British and Foreign School Society, and one at Norwood with which Kay-Shuttleworth had been connected, but the existing system of training was not up to the task of providing the horde that was needed to staff the schools properly. The attempt at establishing a state college was intended to cut across some of the religious difficulties, and was meant to enable Government money to be applied to meet an urgent need. The setback over the religious issue, which forced the Government to drop their plan, made direct state aid in teacher training impossible. The money that would have been spent had to be divided between the two large voluntary societies in the usual way, for these were already to be aided for the purpose of building and supporting schools.[3]

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[1] Robert Owen: op. cit., 4th Essay, demanded a full state system, under the control of the Government.

[2] *Parliamentary Debates*, XX, col. 139 ff.

[3] C. Birchenough: op. cit. pp. 59–60, gives a fuller account.

[4] The Central Society of Education. First Publication, 1837, p. 63.

So strongly did Kay-Shuttleworth feel about the shortage of teachers and inadequacy of training facilities available that he opened a college at Battersea on his own venture, and under his personal control. There were financial difficulties that could have been remedied by a central grant, despite the fees that were charged to patrons of individual students. Provision of this sort was not proving the answer to the shortage of teachers, even when backed by the resources of a big voluntary society.[4]

An effective way had to be devised of applying public money to training the teachers. Grants to aid the constructions of specific training colleges (or 'normal schools') were not enough.[5] Two Government inspectors had been appointed in 1840 to help in disbursing public money, to give advice and to make observations for the benefit of the Committee of Council. The Church of England was given a large share of the responsibility in appointing the inspectors, who were permitted to report to their ecclesiastical superiors as well as to the Education Office. The system was soon to be extended to other denominations, and many more inspectors were needed because of the rapidly increasing amount of work.[6] From 1846 onwards these men were to become the essential parts of an examination system designed to distribute Government money among the schools and training colleges, and hence to stimulate the provision of teachers. An important part of the scheme was the awarding of 'Queen's Scholarships' to promising young pupil-teachers. In

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[1] The Minutes were published annually, and were the forerunners of the later annual reports of the Board or the Ministry of Education. They were occasionally gathered together in chronological order to form a convenient code for reference; see, for example, 1855, *Parliamentary Paper* No. 158.

[2] F. Smith: *The Life and Work of Sir James Kay-Shuttleworth*, 1923, p. 81.

[3] Minutes of the Committee of Council on Education, 11 April 1839.

[4] F. Smith: op. cit. pp. 104–32.

[5] Minutes, 16 Jan. 1844.

[6] Minutes, 4 Jan. 1840, give the details of the 'concordat' which allowed the Government some rights of inspection in church schools.

1854 it could be stated that the distribution of two-thirds of the Parliamentary Grant in Education depended on the results of examinations carried out by the inspectors, whether of pupil-teachers for Queen's Scholarships, or for 'Certificates of Merit' for masters or mistresses.[1]

The Committee of Council set the basis for a proper training organization in a General Minute of 25 August 1846. The fundamental idea was that apprentices, called 'pupil-teachers', were to be selected from the ablest children in the elementary schools, to assist the teachers. They would receive a certificate at the end of five years, providing they had been successful in the inspectors' annual examination. This examination was not intended to be organized on more than a local basis, and would often be arranged in the individual schools. The apprentices were to begin their work at the age of thirteen, and their standard at the end of each year was set out in the Minutes. A similar system of 'stipendiary monitors' was arranged for the lower-standard rural schools, but that was for a four-year term only. The masters in charge of these young persons were to be paid for their trouble. Dr Kay had experience of apprenticing teachers in connection with the Norwood School of Industry in the 1830s.[2]

Pupil-teachers were allowed to sit for a public competitive examination at the end of their five-year period. The examination was arranged by the inspectors, and successful candidates, the Queen's Scholars, were awarded exhibitions to centrally inspected normal schools, of £20 to £25. It was decided to 'reduce the burden' on the normal schools, and so a *per capita* grant was to be paid to these establishments by the Government, for every competent student. The majority only attended college for one year, but some stayed for two, and some even for three years. School managers were encouraged to make use of the services of trained teachers by means of a special grant which favoured those with the greatest length of training. This grant was subject to certain conditions, for the managers or trustees had to provide a rent-free house for their trained teacher, and a further salary equal to at least twice that of his grant. In addition, the school had to be open to inspection.[3]

At the same time it was proposed that a proportion of the inferior appointments in the public service should be opened to those who did well in the scholarship examination, but who did not merit scholarships. A Minute to this end was passed by the Committee of Council, but nothing came of this early forerunner of the Civil Service examinations; the idea was thrust firmly to one side in a later Minute, as being likely to distract pupil-teachers from their vocation.[4]

The number of inspectors had risen to sixteen by 1850, one of them being the Rev. H. Moseley who was later to play an important part in examining for the Civil Service Commission.[5]

Altogether, over four thousand school visits were being made annually at this time, about seven weeks of the year being spent by each inspector in examining teachers and students in training schools for Certificates of Merit, and two weeks being allowed for the central examination of pupil-teachers in each district. These inspectors were men of high educational attainments, and most of them were ordained. In discussing how to recruit assistant inspectors at a conference in 1850, it was proposed that young, well-qualified persons from the universities should be encouraged to enter.[1] It was officially stated shortly afterwards that no one was to become an inspector or 'examiner' in the Education Office without a difficult (competitive) examination unless he was a graduate, 'high in honours at a university'.[2] It would be nearly impossible for such a well-organized and homogeneous group of educated men to have had only a little or slight effect on the development of the schools and teachers, whether they were acting in their capacity as examiners, or as advisers or reporters. It was by such means as this elementary school inspection that Oxford and Cambridge influence was broadcast over the country at large, to reach members of a completely different class in an organized way.

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[1] *Reports of Committees of Inquiry into Public Offices and Papers connected therewith* (Cd. 1715), 1854, p. 233.

[2] F. Smith: op. cit. pp. 57–67.

[3] Minutes, 21 Dec. 1846.

[4] Minutes, 12 May 1852.

[5] Minutes, 25 July 1850.

The first apprentices were approaching the age of eighteen in 1850, and were about to enter for Queen's Scholarships. Their examination syllabus was laid down in a Minute, as a continuation of their course as pupil-teachers.[3] It was stated that there were to be compulsory papers in history, geography, arithmetic, English, and in the 'notes of a lesson'. Their Lordships of the Privy Council expressed a preference for Euclid in any optional paper, but allowed a dispensation for girls in the matter of vulgar fractions and decimals in arithmetic. The echo of such sentiments was to persist for more than a century. About one-quarter of the training college places were to be filled by Queen's Scholars at first.

A large number of practising teachers would have been at a comparative disadvantage in receiving Government grants had not the Certificate of Merit scheme been opened to them as well as to students leaving college. Teachers with years of experience, but without a training college education, or young people who were unable to enter training colleges for one reason or another, would have been handicapped when it came to the distribution of Government money. The scheme of examinations was established in July 1847.[4] Whether they were examined as normal school pupils or as untrained teachers by the inspectors in public examinations, candidates were graded into classes. Comparison was to be made with the standard at the end of each year of the training college course. To each of the three 'years' was awarded an appropriate 'Certificate of Merit', each year being divided into three classes after the Oxford manner. Government grants could be awarded in such a way that the ablest teachers received the greatest amount, and the weakest the least. The official aims of the system were the improvement of the education of the poor, and the raising of the status of teachers, through the agency of examinations. The system was used, in fact, to give central grants to voluntary schools. So convenient was the method of certificating teachers, as opposed to training them at colleges, that determined efforts had to be made to channel the younger teachers away from this course, and to encourage them to enter normal schools, where they might receive a proper education. It was for this reason that assistant teachers, that is to say, young, unqualified teachers, were permitted to sit again for the Queen's Scholarships even though they had failed at the first attempt. A Minute of 10 December 1851 allowed for the certification of pupil-teachers who had failed in their competitive examinations. Those who did not go to the training colleges (and who would not therefore earn their Certificates of Merit in the approved way), were barred from sitting for the qualifying examination for three or four years. In the meantime, they were only allowed a small Government stipend, and were thus given every incentive to go to college and conform.[1]

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[1] Minutes, 25 July 1850.

[2] Cd. 1715, p. 239.

[3] Minutes, 25 July 1850.

[4] Minutes, July 1847. Explanatory Letter to Inspectors.

It should be clear that the intended effect of the Government's examination system at this time was to stimulate the growth in the number of good teachers, and to arrange for these to be trained and employed. The Government thus helped the training colleges directly, and helped the schools by paying part of the teachers' salaries. A financial incentive was given to a young teacher to compete for a Queen's Scholarship while, if this were impossible to obtain, he could still qualify as a certificated teacher. The examinations, which were held by the inspectors in conjunction with the training colleges, were the instruments of this policy. It was an ingenious way of dispensing Government grants, while leaving the touchy denominational situation severely alone. The arrangement was in harmony with the theories of John Stuart Mill, one of whose maxims it was that the State should *enforce* but not *direct* education.[2] In this particular case central grants were used to stimulate the right sort of action. The organization, which had begun with the examination of Church of England teachers, was soon to be spread to all classes of teachers: to those of the parochial unions, to Roman Catholic and other religious bodies, besides those of the British and Foreign School Society. Whether or not the inspectors, as agents of the State, did more than they should have done in directing education is a matter for speculation.

The plan was successful in stimulating the growth of numerous training colleges, and in preparing hundreds of qualified teachers, but there were shortcomings. There were comments, by 1853, of there being too theoretical a bias to the examinations.[3] It was found that large numbers of pupil-teachers spent only the minimum year at their training colleges. Queen's Scholarships were therefore extended to cover a two-year course, and a greater proportion was awarded, and even given to pupil-teachers persistent enough to have failed the competition for three years running. Certificates of Merit were only to be awarded after a two-year period of probation, to exclude weak teachers. The 1853 Supplementary Minute which commented on these points and remedied them, used the examination system to make the changes. Those teachers who were uncertificated were required to sit for a qualifying rather than a competitive examination, it being the Government's intention to form a class of 'registered' teachers below that of the 'certificated'. It may be observed that there were still large numbers of schools that were not in a position to attract the favoured certificated teachers: provision in rural areas was poor.

The Education Committee could also arrange for new subjects to be brought into the curriculum by means of its examination systems. An extra annual grant might be earned after 1853 by teachers who had acquired some drawing ability, whether as pupil-teachers or as students in normal schools. Grants of from one to three pounds were to be awarded to incline the students in this direction; the eventual object of enriching the elementary school curriculum was to be achieved by educating the teachers first. This part of the scheme was to be worked out in practice with the Department of Science and Art.[1]

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[1] Minutes, 25 July 1852.

[2] J. S. Mill: *On Liberty*, 1859, p. 62.

[3] Minutes, 20 August 1853.

The emphasis in most of the teachers' examinations, particularly in the early ones, was on competition. Inspectors were required to *compare* potential pupil-teachers, and to select the best. Up to nine different classes of certificated teacher were specified, with a different grant to each class as an incentive to achieve academic honour. The ablest pupil-teachers were selected by the competitive examination to enter a training college, while the best of these were allocated a larger grant, or a bonus.[2] Later, more places became available and the competitive emphasis was mollified a little. Scholarships were awarded to persons who had not always passed the examination, but who were persistent and industrious; the system of 'registering' teachers was deliberately non-competitive.

4. ELEMENTARY EDUCATION AND THE REVISED CODE OF 1861

The examination system that had been tried out in connection with teachers' grants was well suited to the spirit of the times, with its need to find a way between the Scylla of the State and the Charybdis of individual freedom. It appeared almost certain that the country would have been in difficulties without some Government aid being given to elementary education, and the examination method enabled it to be given with as few strings attached as possible. 'Individual freedom' in this context stood for religious independence. It says much for Kay-Shuttleworth's persistence and ingenuity that he developed a great system of grants from a very small authority: the original money grants were intended for building purposes only.

In 1859 J. S. Mill enlarged on a proposal for compulsory education based on an examination system. To prevent the State exercising an improper influence, he suggested that only matters of fact should be examined in the controversial subjects of religion and politics.[3] This was another effort to bypass the religious question, an earlier attempt at which may be instanced the 1839 'concordat' between the Government and the Church, excluding religious matters from Government inspection. The beauty of the scheme had been underlined by an earlier writer in 1847, who stated that *instruction* would be the province of the people, *examination* that of the State'.[4] It was anticipated that advantages would extend throughout society, without directly involving the schools. The Rev. James Booth, who wrote the article, was chaplain to the Marquis of Lansdowne, who was Kay-Shuttleworth's superior, as Lord President of the Council. Booth proposed that examinations, similar to those that were being initiated for teachers in elementary education, should be extended to embrace middle-class education as well. A Board of Examiners was mentioned, not unlike the Civil Service Commissioners of the future, but it was intended to have a wider influence. These were the views of a man in close sympathy with the ideas of the Marquis of Lansdowne who was an important member of the Government at the time of Kay-Shuttleworth's early days at the Education Office.

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[1] Supplementary Minute, 20 August 1853.

[2] Minutes, 14 July 1855.

[3] J. S. Mill: *On Liberty*, 1859, p. 63.

[4] J. Booth: *Examination the Province of the State*, 1847, p. 22.

While the system of grants to teachers was gaining in effectiveness, other weaknesses began to reveal themselves which could not best be remedied in this way. Attendance was, for example, extremely erratic at many rural schools, and a new principle had to be introduced to encourage greater regularity. The central grants, too, tended to reach the better schools only, leaving the weaker rural schools without central support. A capitation grant was accordingly awarded to country schools in 1853 whereby, in a school of less than fifty children, money from Whitehall would be received at the rate of six shillings per head for each boy, and five shillings for each girl who attended regularly.[1] There were slightly diminished rates for schools with larger numbers of pupils, and the whole was superimposed upon the 1846 grant scheme. An explanatory circular stated that it was the particular object of the Minute to improve that class of schools not benefiting under the 1846 Regulations.[2] This capitation principle was subsequently extended to towns, at first in connection with the education of part-timers.[3] Capitation grants were being allowed on 247,691 children by 1859.[4] Teachers in all the schools concerned were to be certificated, but the introduction of the new principle was to alter slightly the inspectors' examination system in dispensing Government money. The inspectors' importance in the matter of distributing grants was soon to be augmented in a very remarkable way.

A Royal Commission, known as the Newcastle Commission, was set up in 1858 to look into the state of popular education in England.[5] Assistant Commissioners were appointed to collect information, for the subject was a wide one, and the Education Committee was concerned only with part of the picture. It was apparent from the Report that there was still a division of opinion as to whether the State should remain involved with education.[6] The Report was in favour of a system of local rating to aid elementary education, though democratically elected authorities were not to arrive in practice until the 1870 Education Act.

The amounts being spent on education were large, and were likely to increase. The Newcastle Commission heard the evidence of Ralph Lingen, an Oxford 'first' and once a Fellow of Balliol College, but now Secretary to the Committee of Council. The immense complication of work in the Education Office was pointed out publicly to the Commission.[7] Each teacher, and each set of managers in receipt of a central grant, was in correspondence with the Office; Kay-Shuttleworth had made mention of the difficulties of carrying out the business in this way. The Commission recommended that the Central Office should administer grants obtained by taxes, dispensing this money only by such means as capitation grants, and grants to pupil-teachers. Rate money, under the proposed new system, was to be distributed under local inspection from county or borough 'boards of education'. Payment in this case was to be made to children who were competent in the three Rs (reading, writing and arithmetic), at a level appropriate to their age. One of the main aims was again to use public money to aid the smaller, poorer schools, which had been receiving insufficient help or stimulus under the existing system.

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[1] Minutes, 2 April 1853.

[2] Explanatory Circular, 20 August 1853.

[3] See, for example, the Minute of 29 April 1854.

[4] *Report of the Committee of Council on Education*, 1859–60, p. xxxvi.

[5] *Report on the State of Popular Education in England*, 1861.

[6] Ibid. pp. 297–98.

[7] Ibid. pp. 321–27.

The idea of applying local rates did not survive the denominational antagonism of the times. The Education Department (as the Office became in 1856) was at the centre of political as well as religious turbulence, and local rating had to be postponed. Robert Lowe, the Vice-President of the Department, was left to put into practice as many of the Commission's ideas as possible. In trying to simplify the grant system, and to rationalize the work of the Education Office, he brought out the 'Revised Code' of 1861, which was to determine the nature of the grant system for many years.[1]

The main financial changes in the Revised Code were that there was to be a system of capitation grants, so designed as to encourage regular attendance, and that there were to be forfeits from these grants with respect to those children revealed to be deficient in the three Rs. Inspectors were to examine the children to assess their competence, the six standards of which were defined in a table or syllabus.[2] Teachers were still required to be certificated, as a condition for grant, but the class of certificate did not affect their grants. Any independence of the teacher from the managers which may have resulted from his central stipend was eliminated; grants were only to be made through one of the managers, and the managers were thereby allowed to strike the best bargain that they could with their teachers.[3]

The effects of such a scheme were extremely unhappy. True, the system was cheap, but it had the effect of opening a rift between teachers and inspectors. There was already a wide social gap, but now there was distrust as well. Teachers concentrated on training their pupils for the minimum conditions of the grant regulations, by fair means or foul if some reports were to be believed. Inspectors had to counter any dishonesty.[4]

Matthew Arnold, himself an inspector, was one of the foremost critics of the system which followed the Revised Code. In his report for 1867 he noted the 'lack of life' induced in the schools by this system of 'payment by results'.[5] He went on to comment on the decline in the supply of pupil-teachers, and on the poorer morale, despite the greater number of publicly inspected schools. There were, he showed, only 53 candidates for 72 vacancies at Borough Road Training College. 'The character of inspection has changed', said Arnold. 'A change in the Education Department's regulations which, by making two-thirds of the Government grant depend upon a mechanical examination inevitably gives a mechanical turn to the school teaching, a mechanical turn to the inspection. . . .'[1] He pointed out that the notion of payment by results was well-fitted to catch the public fancy, but was nevertheless unsound.

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[1] For a copy of the Revised Code, see the *Report of the Committee of Council on Education*, 1861–62, pp. xvi ff.

[2] Revised Code, Section 48.

[3] Revised Code, Section 21.

[4] For an account of the harshness of the system, see Sir G. W. Kekewich: *The Education Department and After*, 1920, pp. 10–15. The 'examiners' at the central office, who collected information from the inspectors' reports, were even more out of sympathy with the elementary school teachers and managers than the worst of the inspectors.

[5] *Report of the Committee of Council on Education*, 1867–68, p. 290.

It was this mechanical process that appealed to many of those concerned with public administration at the time. It was a sort of logical extension to the happier methods that had been begun in 1846, whereby Government grants were dispensed to encourage good teachers. Inspectors continued to operate an examination system, but it had contorted itself out of shape; it had become too mechanical and inhuman. A determined effort needed to be made to ameliorate the worst effects of the Revised Code. From 1867 onwards, for example, additional grants were given, first to pupil-teachers, and later for stimulating the teaching of subjects other than the basic ones.[2] More effective than these were the examples of such men as Matthew Arnold, one of the more enlightened inspectors, who was said to have admitted on one occasion that he never made any deductions from the grants.[3] He was acting against the instructions of his Department, but he acted sensibly, and with compassion. The overall framework of the Revised Code was, however, to linger on for several decades. The Chief Inspector of Elementary Schools could still comment upon the restricted outlook in 1910, when he blamed local authority inspectors for perpetuating illiberal methods.[4]

5. EXAMINATIONS IN THE 1850S

1850 marked the beginning of a decade in which examinations became really popular. Competitive examination, in particular, was held up as the panacea for many educational or social ills. So many systems were started in this period that it appears as a sort of spring or source, the substance of which comes rolling down the years in the form of one famous public examination system after another. Competitive ideas could flourish at a time in which 'free trade' was the order of the day, and in which Charles Darwin was postulating the 'survival of the fittest' in his *Origin of Species*.[5]

The Oxford University Examination Statute of 1850 showed the potential strength of an examination system in introducing new subjects for study. Tillyard could even state, without qualification, that the rise of the modern system of competitive examinations in this country could be fairly dated from this innovation.[1] The India Act of 1853 showed the way in which the evils of patronage could be abolished by similar means. The local examinations of Oxford and Cambridge came, at the end of the decade, to join the Indian and the Woolwich examinations in affecting secondary schools. The College of Preceptors, founded in 1846, began to examine immediately before the beginning of the decade; and it was at this time, too, that the Government introduced Queen's Scholarships to normal schools, and started their examinations of elementary school teachers. The Revised Code, itself a sort of examining machine, was conjured up in the same decade, to dispense a cheap form of education. It will be shown that the Science and Art Department became active after the Great Exhibition of 1851, and did much of its business by examination. Examinations were becoming more and more popular in the Civil Service, with the Medical Council (established in 1861), for entry into the Army, and in a dozen middle-class professions, though these examinations were not necessarily competitive.

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[1] *Report of the Committee of Council on Education*, 1867–68, p. 296.

[2] See, for example, the *Report of the Committee of Council on Education*, 1866–67, p. xcviii.

[3] Sir G. W. Kekewich: op. cit. pp. 12–13.

[4] Board of Education Memorandum No. 21. The Status and Duties of Inspectors Employed by Local Education Authorities, 6 Jan. 1910. (Widely known as the 'Holmes Circular'.)

[5] C. Darwin: *Origin of Species*, 1859.

It would not, of course, be true to say that there was little new competitive examining before or after this decade. The Oxford Examination Statute of 1800, for example, had ensured competition in a limited sphere at that university, while the full application of competitive examination to the Civil Service had to wait until after 1870. All that can be said is that it was in this decade that the idea of having competitive examinations came to its fullest fruition. The decade was a springer from which there rose up a whole edifice of examinations. Radical ideas had had sufficient time in which to become popular; their reasonableness had eroded opposition by 1850, and it had become the modern, progressive policy to advocate their use. This became possible in practice by the widespread success of rank after rank of brilliant university graduates. The outstanding person in the public service so often revealed himself as an Oxford man with a 'first', as in Lowe's case, or a 'double first', as in Gladstone's. The ideas of the early Radicals, tempered into a later Liberalism, were put into practice through the instrumentality of university graduates, brought up in the old traditions. The fertilization of the old institutions with the new ideas resulted in a remarkable crop of fresh examination systems, quite apart from a vast number of other reforms.

Two sorts of systems have been considered in this chapter. One was a fairly direct application of earlier Radical thought, being the result of political pressure. It was by means of the examinations connected with the Civil Service Commissioners that patronage was ousted, and the way opened for a fairer society on lines sketched out by Bentham. The other system of examinations was the result of a compromise between the Radicals and the Church. An examination system appeared to be the only way in which a Government grant might be distributed among the denominational schools; nearly half a century passed before a better arrangement was agreed and the financial organization began to work properly without relying upon examinations. The two sorts of examination system had much in common, for they were the creatures of their times; they can, however, serve to illustrate much of the nature of all the important examination systems of the 1850s. Other systems were certainly run on similar lines.

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[1] A. I. Tillyard: *A History of University Reform*, 1913, p. 100.

Mention should be made of the examiners, for they played a more important part in their organizations then than their successors do today. They were almost invariably men of the highest intellectual attainments, and frequently in a social as well as an intellectual class that was well ahead of their candidates for examination. Sir G. W. Kekewich has shown how elementary school inspectors moved about the educational chess board like knights or castles, overawing lesser pawns by their superior social class, education and official position, as well as by their clerical garb in the majority of cases.[1] Their power was scarcely limited when dealing with their underlings. The examiners were independently-minded gentlemen, perfectly prepared to make any recommendations of their own as to how their system should be run. The Oxford examiners could call for reforms in the University examinations in 1832, and their colleagues in the public service would naturally behave in the same way.[2] Matthew Arnold criticized the system of payment by results in a way which may seem positively disloyal to the Education Department.[3] His predecessors had been given a freer hand than he in determining standards and syllabuses. A similar situation, though less marked, could be observed in the Civil Service system. The point to note is that the examiners were independent persons, in a class removed from the bulk of their candidates, they were often educated in a different way, and may even have been quite out of sympathy with the people they were examining, or with the schools that taught them.

The career of F. W. Walker will serve to end this chapter and to illustrate conveniently the way in which the Radical ideas came to be put into practice by Oxford and Cambridge men. Born in 1830, Walker won an open scholarship to Oxford, where he graduated with high honours. At the age of twenty-seven he went as Head Master to Manchester Grammar School, to begin the reforms that revitalized that ancient institution. He was persuaded to go to Manchester by John Matthias Wilson, described as 'the last of the Benthamites'.[4] He began the teaching of modern studies in his school. Needless to say, the secret of his success there, in that period, was the extensive use of competitive examinations, both public and internal to the school.

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[1] Sir G. W. Kekewich: op. cit. pp. 3–33.

[2] *Reasons for the Suggestion of Certain Alterations in the Examination Statute lately submitted to the Vice-Chancellor and Heads of Houses by the Public Examiners*, Oxford, 1832.

[3] Matthew Arnold: *Reports on Elementary Schools, 1852–1882*; ed. F. Sandford, 1889, pp. 110 ff.

[4] A. A. Mumford: *The Manchester Grammar School*, 1919, pp. 326 ff.

CHAPTER THREE

Secondary School Examinations

I. OXFORD UNIVERSITY AND THE EXETER EXPERIMENT

The ancient universities were reforming themselves in the nineteenth century with the help of examination systems which both introduced new subjects and raised academic standards by competition. Elementary education was, at the same time, being organized and encouraged by central aid, inspection, and the use of examinations. There were still backwaters of idleness or ignorance to be found, whether among the poll men of the universities or among the ploughboys of the more remote rural districts, but it was theoretically only a matter of time before the reforming brooms swept all clean before them.

The situation in the intermediate schools was much less promising. In the mid-nineteenth century, those schools which purported to give an education in advance of the parish elementary school (often a school of the National Society), but which did not pretend to give an education of the highest public school type aiming at entry to the universities, were generally described as 'middle-class schools'. The richest people sent their sons to Eton or Winchester, the poorest to the local elementary school; others sent their sons to a class of schools, the constituents of which differed widely in purpose and organization. Many of these establishments were anciently endowed grammar schools, others were run solely for profit, being privately owned. Some set a high intellectual or moral tone, others failed to do so. Some concentrated upon the classics, others upon commercial work or modern subjects. The Victorian father who wished to educate his children was often hard put to it to make a choice, because there was such a diversity of standard and purpose. No machinery was available to help him to decide.

It was from such schools as these that the modern grammar school was to emerge in the next century. First, the local authorities were to establish a very few scholarships for elementary school children to attend the neighbouring 'secondary' schools; secondly, they were to establish such secondary schools themselves, following the 1902 Education Act.[1] With the nation-wide organization that developed from this there were to come accepted standards of method and scholarship, whereas, half a century before, a man was very often forced to rely upon personal recommendation or on advertisement in choosing a school.

There had long been criticism of the standard of education in middle-class schools, many of which were less effective than some of the better-organized National Schools.[2] Such comments as these were likely to have been a potent means of stirring middle-class taxpayers into some sort of activity.[3] The middle classes were becoming jealous of the tax-aided education for the poor, as this grew more generous. While admitting the benefits which inspection and discipline were bringing to elementary schools, they nevertheless distrusted state interference.

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[1] See Chapter 5, for an account of secondary school entrance tests.

[2] J. Booth: *Examination the Province of the State*, 1847, p. 9 (note).

[3] T. D. Acland: *Some Account of the Origin and Objects of the New Oxford Examination for the Title of Associate in Arts and Certificates for the Year 1858*, 2nd edn. p. 104. A letter from the Exeter Examinations Committee to the Committee of Council on Education, 23 January 1857.

A few of the better middle-class schools were in the habit of obtaining an impartial report upon their performance from persons of consequence, and some schools were required to do this by their governors.[1] Certain schools would invite local parsons to act as inspectors while others, more ambitious perhaps, would invite a fellow of an Oxford or a Cambridge college.[2] This was, however, an expensive matter, and the majority of the schools avoided such a scheme, either because of the cost or, one may guess, for the very reason that such impartial criticism might bring about the comparisons that would have been so helpful to the parents.

One writer, complaining about the lack of a standard of comparison, stated that 'charlatanism and humbug flourish, puffing and advertising conduce more to success than learning or painstaking skill'.[3] The lack of common measuring instruments in an era of advertisement and free competition was the greatest weakness. 'The one thing which the middle classes want', wrote the Rev. Frederick Temple in 1858, 'and which they cannot get without help, is *organization*.'[4] This organization, when it came, was to be in the form of an examination system, consciously based on those which were reforming the universities and the elementary schools. Needless to say, several organizations sprang up to meet the demand.

The beginning of the modern secondary school examination system is often believed to have been in 1858, at the behest of Oxford University. Both Oxford and Cambridge organized 'local examinations' in that year, designed to test the products of the middle-class schools. The initiative taken was, in fact, that of so provincial-sounding a body as the Bath and West of England Society for the Encouragement of Agriculture, Arts, Manufactures and Commerce. This was essentially a society for farmers and landowners which, in 1857, formed a small committee to organize a local examination for middle-class schoolboys. The idea may have grown out of a prize that was awarded by Lord Ebrington for young farmers of from eighteen to twenty-three years of age. The Society put up prizes to the value of one hundred and twenty guineas in 1857, for competition among schoolboys in the West of England. Over one hundred were to attend at Exeter in the June of that year for a four-day examination. Most of the organization was in the hands of Thomas Dyke Acland, a 'double first' at Oxford and later a Fellow of All Souls College, who was a well-known West Country landowner and politician. This Oxford connection was to have a decisive effect on the nature of the examinations. Acland wrote up his account of the history of the examination and its aims, included much of the official correspondence, and published it with an account of the new 'Oxford Locals' examination which was to follow.[5]

The first move in organizing the pilot examination of 1857 was to write to all known schoolmasters in Devon, Somerset and Cornwall, asking for their suggestions for examination schemes. The necessity of obtaining the hearty cooperation of both teachers and parents was observed from the beginning.[1] The examination was initially intended to be connected with the 'practical occupations of life'. One of the 'departments', or groups of papers, in the first examination was entitled 'Practical Science and Art', and was treated with reference to the probable future occupations of the candidates.[2] The practical results of this section were unsatisfactory, and revealed little teaching of such skills at school, according to one of the examiners.[3]

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[1] N. Carlisle: *A Concise Description of the Endowed Grammar Schools in England and Wales*, 1818, Vol. 1, pp. 583–84.

[2] Taunton Report, 1868, Vol. 1, p. 329.

[3] J. Booth: op. cit., p. 9.

[4] T. D. Acland: op. cit., from a letter, p. 108.

[5] Ibid. p. 15.

Meanwhile the Society's Council had passed a resolution that 'Skill in business generally is best acquired by practice, and that the best preparation for a practical life is a good general education.'[4] Temple, a close friend of Acland, had chided him for confusing apprenticeship with education. Temple also won a 'double first' at Oxford, but began his career in the Examinations Section of the Education Department, and was a Government inspector of training colleges at the time.[5] Later he became Headmaster of Rugby School, and finally Archbishop of Canterbury. As an Oxford man, and an outstandingly successful product of its system, he advocated the adoption of a liberal type of education, applying it to a middle-class situation. The middle-class attitude of favouring professional studies or a technical education was wrong, according to Temple. The predominant idea of a good education was, he stated, to make *men*, not engineers or artists.[6] Temple had considerable influence; he was one of the examiners on this first occasion, and he was in close touch with the university men at Oxford and Cambridge who were to take over this middle-class examination in the following year and broadcast it over the country.[7]

The Exeter examination, for it was in this city that the experiment took place, was essentially competitive in its operation. It was open to both seniors and juniors, of up to eighteen and up to fifteen years of age respectively.[8] These, oddly, answered the same papers and were placed on the same honours lists, due allowance being made for age. There were to be two classes of honours in each 'department', with prizes of five pounds for those with first-class honours. A prize of ten pounds was awarded for the best general examination result, and there were certain lesser prizes as well. The religious issue was sidestepped by permitting the withdrawal of Dissenters from an otherwise compulsory paper in religious knowledge. Apart from the 'science and art' and the religious knowledge departments there were two others, one in languages and history, the other in mathematics. A preliminary examination in reading and arithmetic was designed to weed out the weakest candidates. Parents and other visitors were allowed to be present in the examination rooms, not merely because this was a public examination but because it was especially wished to dispel any sense of mystery.

The Committee had no intention of making the examination a permanent feature of the Bath and West of England Society's work. It was hoped instead that once the possibilities had been demonstrated, the examination would be taken over by a more powerful body.[1] It was suggested that the Committee of Council on Education might be interested in extending its powers, and the local Society invited the attendance of Government inspectors. These were asked chiefly because of their considerable examination experience in elementary education and at the universities, any suggestion of state intervention having been hastily brushed aside by Lingen, the Secretary at Whitehall.[2] Headmasters in correspondence with Acland had made the same point, one of them remarking that the universities would be gladly accepted as natural guides, as an alternative.[3] The Education Office sent down Temple and J. Bowstead, sometime Fellow of Pembroke College, Cambridge, and a moderator in that University. The former was an inspector of Church of England training colleges at the time, the latter the inspector of British and Protestant Dissenting Schools in the West of England.[4] Although not so well known as Temple, Bowstead was an eminent mathematician, being Second Wrangler in 1833, and a Smith's Prizewinner.

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[1] T. D. Acland: op. cit., p. 18.

[2] Ibid. p. 26.

[3] Ibid. p. 189.

[4] Ibid. p. 27.

[5] *Memoirs of Archbishop Temple*, ed. E. G. Sandford, 1906, Vol. 1, p. 63 and p. 87.

[6] T. D. Acland: op. cit., p. 49. Letter from Temple to Acland, 20 Oct. 1857.

[7] Ibid. p. 197. Rev. F. Temple's Speech of 18 June 1857.

[8] Ibid. pp. 113 ff. 'First Notice to Competitors'.

The final list of thirteen examiners showed that no slight interest was being paid to the examination. Most of them were university professors or well-known public servants. Sir Stafford Northcote's name was among them and will be remembered in connection with the Civil Service Report of 1853; he was also on the Committee of the Bath and West of England Society.[5]

Temple's report on the examination showed up many of the weaknesses, especially in French and in science. The 'basic' subjects, mathematics and the classics, were well done. Temple's view was that this was because the organization of these traditional subjects in the universities tended to define standards and stimulate the provision of suitable school textbooks. The practical subjects, as they were being taught at the time, he regarded as valueless.[6] Temple's attitude throughout the affair favoured a good general education, and not the utilitarian type that was popular among the middle classes.[7] The professional examinations which were taken by middle-class youths were not, in his opinion, encouraging a satisfactory education. Influential professional men wrote to Acland to let him know that they, too, really wished for a good general education, to be followed by specialized training; some of their professional societies later petitioned the universities to the same effect.[8] The mere preparing of boys for 'business', which Temple stated to be the avowed aim of many middle-class schools, was inadequate.

The high liberal education of the universities was to be carried down to the middle-class schools in the form of a 'good general education'. University men, trained in the 'honours' system of Oxford and Cambridge, had already started to reform elementary education and the public service with the help of examinations; now they were turning their attention to secondary education. The list of examiners

[1] T. D. Acland: op. cit., p. 80.
[2] Ibid. p. 112.
[3] Ibid. pp. 88–89. Letters from the Rev. Alfred Barry, of Leeds Grammar School, and of a Mr Templeton, the Principal of a Classical and Commercial School in Exeter.
[4] Ibid. p. 111.
[5] Ibid. p. 138.
[6] Ibid. pp. 182–94.
[7] Ibid. p. 49. Letter from Temple to Acland, 20 October 1857.
[8] Ibid. pp. 93–95.

for the pilot scheme at Exeter would not have disgraced the senior common room of one of the better Oxford colleges.[1]

2. THE OXFORD AND THE CAMBRIDGE LOCAL EXAMINATIONS

Public interest was aroused by the Exeter examinations. There was a movement within the universities, fanned by Acland and Temple to such good effect that, while the candidates were still sitting their examination at Exeter, Oxford University passed a statute enabling it to promote a similar scheme in ensuing years. In Acland's words, it was proposed to 'bring the honours of the universities to bear upon what is called a middle-class education'.[2] 'Oxford has opened a locomotive department,' rejoiced Acland, 'the first line of rails having been laid down by the West of England'. To render the examination more attractive, the University arranged for the successful candidates to receive the title of 'Associate in Arts of Oxford University'. This was probably at Temple's suggestion but, as a similar title was not awarded at Cambridge, it lost significance.[3]

Four 'schools' were proposed by Temple, on the Oxford University pattern, and both seniors and juniors were to be examined, as at Exeter. The aims of the new examinations proposed at Cambridge, as well as Oxford, were to extend the influence of a liberal education. 'We want something that will endear us to the middle classes', wrote a former Hulsean Lecturer in 1857. 'We want something that will make Oxford and Cambridge more than mere names in the minds of these classes, and prevent them also from being regarded as merely clerical seminaries . . .'. He went on to mention, incidentally, the possibility of finding out talented boys in this way, for university entry.[4]

The Cambridge University Local Examinations were first held in December 1858, and they differed in detail from the Oxford Locals which had preceded them by a few months. Candidates were to be placed into three honours classes, with a fourth class for 'pass men', but there were no separate honours lists for each subject, as there were at Oxford. Both senior and junior candidates were to be examined, but the lower examination was intended for those under the age of sixteen, not under fifteen as at Oxford. There was to be a preliminary examination first, and there were ten sections to follow. Each candidate had to answer three or more, but less than six, sections; the religious knowledge section was compulsory except for conscientious objectors, who were given a suitable alternative paper.[5]

Acland felt that parents 'in the lower middle-class ranks' wished to keep their children at school until fifteen as a rule. He stated that it was the pressure of the classical schools that was responsible at Cambridge for the higher age limit in the junior examination, and he regretted this.[6] An examination on the Cambridge lines would, he imagined, let in grammar school boys to compete with those from the commercial schools and thus negate one aim of the examinations, which was to improve schools preparing for trade and agriculture. Thomas Arnold had given some thought to the education of the middle classes as long ago as 1832, and although this was too early a period for examinations to be advocated as a solution to the problems of liberalizing the middle-class commercial schools, many of his comments were merely echoed by Acland and Temple in 1857. Thus, a good general examination was advocated.[1] Although the 'commercial schools' seem to have been chiefly borne in mind by the reformers when planning ahead, the actual examinations that ensued, the university 'locals', were patronized to an ever-increasing extent by the grammar school candidates who were receiving an academic education.[2] It is interesting to observe that this tendency was noted by Acland as early as 1858. This was not, however, a matter which excited any great controversy at the time. Marks for the religious knowledge paper at Cambridge were added to the total like those of lay subjects, and it was rather this departure from the Oxford Regulations which attracted most discussion.[3]

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[1] T. D. Acland: op. cit. p. 138.

[2] Ibid. p. vii.

[3] Ibid. p. 76. Letter from Temple to Rev. Dr Jeune, April 1857.

[4] Ibid. p. 87.

[5] Cambridge University Examinations Syndicate Regulations for 1858 (printed in T. D. Acland: op. cit. p. 213).

[6] T. D. Acland: op. cit. p. vii.

The Oxford Regulations had followed those of the Exeter scheme very closely. The Cambridge Regulations differed only in detail, and there were consultations between members of the Universities of Oxford and Cambridge in the autumn of 1857.[4] Nor were these two universities alone: Durham set its first local examination in October 1858, and there were reports of progress at Dublin also.[5] The 'local' examinations were the agents of the universities in the outside world, encouraging middle-class schools to follow the lines of a general education. It was typical of the period that the examinations should be highly competitive, with honours lists and prizes. The examinations were kept quite distinct from the schools initially, being consciously an extension of the universities.

The Oxford and Cambridge 'locals' were moderately successful; they satisfied a need, and their scope was gradually extended. Girls were admitted to the Oxford examinations in 1870, and the maximum age limits for honours were raised to nineteen and sixteen soon afterwards.[6] Special 'School' examinations were introduced in 1877. A lower 'Preliminary' examination came in 1895, while a higher examination, ultimately to be called the 'Higher Local', had been established in 1877. 'Army Leaving Certificates' made their appearance in 1905, to give exemption from certain Army entrance examinations. Similar developments occurred at Cambridge. Girls were admitted as early as 1865, while private arrangements had been made for their examination in 1863. A 'Higher Local' was introduced in 1869, a 'Preliminary' examination in 1895, and 'Army Leaving Certificates' in 1905. The number of candidates grew steadily so that, by 1908, each examination system dealt with over twenty thousand pupils annually.[1]

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[1] Thomas Arnold: Letters to the *Sheffield Courant*, April 1832, printed in the *Miscellaneous Works of Thomas Arnold*, 1845.

[2] *Board of Education. Report of the Consultative Committee on Examinations in Secondary Schools* (Cd. 6004), 1911. Evidence, p. 369.

[3] T. D. Acland: op. cit. pp. x–xi.

[4] Ibid. p. vii.

[5] Ibid. pp. 221 and 227.

[6] For these, and the following details, see the annual Regulations of the two examining bodies. These were conveniently summarized in the *Report of the Consultative Committee on Examinations in Secondary Schools* (Cd. 6004), 1911, pp. 13–14.

The universities' local examination boards encouraged responsible local bodies to set up as the agents of the university authorities, receiving part of the fees to cover expenses, and being responsible for arrangements away from the universities. The examinations were not generally organized by the schools to which the candidates belonged, as they were later. The main innovation, and it was a gradual one, was the introduction of the 'School Certificate' examination, sponsored by the two university bodies, and destined to involve the schools much more closely with the examination work.

The Cambridge Syndicate announced that it was prepared to examine and report on secondary schools in 1862 in addition to its 'local examination' work, and sometimes in conjunction with it. No certificates were given for the examination and inspection that followed until the idea was put on a formal footing in 1905 with the introduction of Senior and Junior School Certificates.[2] The more difficult examinations given under these School Certificate Regulations were generally modelled on the papers used for the Senior and Junior Locals, though papers might be set on special school syllabuses at a greater charge. Teacher-participation was allowed in the 'school' examinations even to the extent of allowing the teachers to mark some of the papers, subject to the overall inspection of the university examiners. The lower classes in the schools were originally given specially prepared papers, or examined orally. The steady growth of school inspection and examination resulted in as many as eighty-two schools being examined in 1908, but the number being inspected (as distinct from being examined) was already beginning to fall because of inspection by the Board of Education following the 1902 Education Act. Use was made of the local examination papers wherever possible in the school examinations but the 1905 requirements for the School Certificates were rather more onerous than before. Only pupils who had attended an inspected and accepted school continuously for two or three years were entitled to enter, and a greater number of compulsory subjects was demanded.[3]

Similar arrangements were made at Oxford for the special examination of schools, in 1877. School candidates might, henceforward, sit for certificates issued under the 'Local' scheme, or they might be examined specially by means of easier papers which did not lead to a certificate. In the first case, the school turned itself into a local agent of the university, but invigilation and marking were carried out by university nominees. In the second case, the examinations might either be set specially on the school syllabus by external examiners, or the papers set by the teachers themselves might be sent away for moderation by the university examiners.[4] Ninety-eight schools were examined in this way in 1909, but again the number of schools inspected (as opposed to examined) dwindled drastically afterwards.

At its least formal, therefore, the 'school' examination was little more than the privately arranged inspection of an earlier day: it was in this way that it may have started at Cambridge. At its most formal, the school acted as an agent of the university local examining body. The two aspects of the 'school' examinations which rendered them ever more attractive than the 'locals' to the teachers may have been that teachers were given a greater part to play in the examination, and that it was possible to examine complete classes at their appropriate levels of attainment. It was coming to be appreciated by schoolteachers that there were sound educational grounds for having regular internal examinations, suited to a whole annual intake of pupils, and not merely for the few ablest, as was the case with the local examinations at first. Examinations could act as a stimulus to work and provide a measurement of attainment without being excessively competitive. A writer in 1877 could even state that 'examinations should serve . . . to portion out the course. They are not directly for discovering knowledge or ability'.[1] This was a far cry from the stark competition of 1858.

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[1] Cd. 6004, pp. 368 and 375.

[2] Ibid. pp. 370–72.

[3] Ibid. p. 370.

[4] Ibid. pp. 365–67.

An important factor in the development of the local examinations was the cautious encouragement given by the Taunton Commission in 1868.[2] The local examinations were criticized for being too dear and too difficult. Only small numbers of pupils were entered by schools, and private coaching was thus encouraged at the expense of the remaining pupils. Nevertheless, the Oxford and Cambridge systems compared well with their competitors, and were considered to be better-suited potentially to the secondary schools because they bore the stamp of the two great universities. It was stated that it would be better to enter whole classes for the examinations, rather than individuals, and the 'school' examinations came into favour in consequence.

3. THE TAUNTON COMMISSION AND THE ENDOWED SCHOOLS ACT OF 1869

The Schools Inquiry Commission, known as the Taunton Commission, sat between 1864 and 1868. Its voluminous Report presented at the end of this period, gave a clear picture of the state of middle-class education at the time. The intention of the Government was for an inquiry to be made into education covered neither by the Clarendon Commission on the Public Schools, which had reported in 1864, nor by the Newcastle Commission which had reported on elementary education in 1861. It was clear from the 1868 Report that there were too few middle-class schools, especially in the newer industrial areas.[3] Not only had many of the endowed grammar schools sunk to a standard below that of the National Schools for elementary education, but some of the foundations had become mere sinecures.[4]

As a general principle, and because different classes of parents called for education up to different ages for their children, it was proposed in the Taunton Report that endowed schools should be divided into three types, for administrative or descriptive purposes.[5] First-grade schools were to be those which prepared their pupils for university entry at nineteen years of age, teaching Greek and Latin. Second-grade schools were intended for those likely to enter the professions, leaving school at the age of sixteen. The third-grade schools were intended for the yeoman class, leaving for work at the age of fourteen; it was intended that there should be at least one of these establishments in each town of any size.[1] It was hoped that some sort of provincial authority would be established in each region to determine the distribution and grading of schools, and to decide whether or not they should cater for boarders.[2]

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[1] H. Latham: *On the Action of Examinations, Considered as a Means of Selection*, 1877, p. 403.

[2] Taunton Report, Vol. 1, pp. 330–36.

[3] Ibid. Vol. 1, pp. 428 ff.

[4] Ibid. Vol. 1, pp. 224–28.

[5] Ibid. Vol. 1, p. 15.

The Report advocated the employment of centrally-appointed inspectors in each of the eleven Registrar-General's divisions of the country, to see that standards were maintained.[3] Each county in the district might then have a 'court of examiners' to assist the inspector in arranging the public examinations that were to keep the system running. It was proposed that the whole should be coordinated by a central Council of Examinations, composed of university men and Crown nominees in equal numbers.[4] Class-lists in alphabetical order were envisaged for each district, but the examinations were not intended to be competitive so much as a 'fair test of average work, such as a scholar of average ability and diligence might achieve on leaving school'. The papers should not be such as would 'strain clever boys and throw boys of inferior capacity hopelessly out'.[5]

Many of the methods of the 'local examinations' were held clearly in mind. The custom of using practising teachers as examiners was developed earlier by London University in its matriculation examinations that were widely taken by secondary school children, and this idea was praised by the Commissioners.[6] The Report suggested that about two-thirds of the examiners should be teachers, but recommended that they should only examine outside their own counties under the proposed scheme, for fear of favouritism or local pressure.[7] An advantage of the examination system was that it could be readily applied to private schools as well as to the endowed schools with which the Government intended to interfere. It was proposed that private or proprietary schools which came up to certain standards should be registered and partially absorbed into the system.

Arrangements were suggested also for the certification of teachers, following an examination that was to take account of professional requirements. This would have encouraged professional standards by providing in effect a register of teachers.[8]

The intention of the Commissioners was that provincial authorities should draw up schemes for the better use of endowments, which should then be submitted to Parliament through a central authority.[9] This authority, it was suggested, might be formed either by enlarging the existing work of the Charity Commissioners or, alternatively, it might be constituted specifically for educational purposes. Some, but not all of the administrative details were to materialize with the 1869 Endowed Schools Act.

The need for external secondary school examinations to be popularized was generally appreciated at the time, at least in progressive circles. The variety of standard was quite bewildering, and some form of measurement was felt to be

[1] Taunton Report, Vol. 1, p. 582
[2] Ibid. p. 583.
[3] Ibid. p. 620.
[4] Ibid. p. 649.
[5] Ibid. p. 621.
[6] Ibid. p. 622.
[7] Ibid. p. 622.
[8] Ibid. p. 614.
[9] Ibid. p. 619.

necessary. An Assistant Commissioner for the Taunton Commission who had investigated conditions closely in certain areas, declared that the want of regular independent examinations was 'one of the causes of badness' of the third-grade schools that he had visited.[1] Any suggestion, however, that the middle-class schools might come under a central authority in a similar way to the elementary schools caused immediate alarm; the analogy was sufficient to turn opinion in favour of the universities as external examining bodies for secondary schools, so strongly was Government interference mistrusted.[2] Goldwin Smith, the Professor of Modern History at Oxford, who gave evidence to the Commission, came out strongly against the continental practice of placing authority for inspection or examination at the centre of political power.[3]

The existing schemes of public secondary school examination were all reviewed in the Taunton Report. The custom of inviting special university examiners to visit a school, whether privately, or through the offices of the local examination boards, was felt to be satisfactory, but it was expensive, and the bad schools were less likely to participate than the good. The Cambridge Local Examinations Syndicate, it may be recalled, had a list of examiners available for this purpose, but their services were not greatly in demand at this early stage.[4] Matriculation examinations at Oxford and Cambridge used too limited a range of subjects to be really suitable for the majority of secondary schools; modern languages were rarely tested, for example. The London University matriculation examination was held to be the best of its kind in providing suitable subjects for secondary schools, but again, very few sat the test at this time.[5] The Oxford and Cambridge Local Examinations were too dear and too difficult, but it was mentioned that use might be made of these systems, if only the examination of whole classes could be arranged.[6] As it was, small numbers were entered for the 'locals' from each school, and private coaching for the abler children resulted at the expense of the weaker. The College of Preceptors set examinations for children as well as for teachers. The objection in this case was one of principle, in that parents felt they had no assurance that the faults of a bad school would be censured, since the examinations, which reflected the work of the teachers, were carried out by a teachers' organization.[7] The fact was that the College of Preceptors lacked the standing of the universities although, latterly, it had been doing useful work.

It was in the light of such information as this, gathered as evidence from witnesses and from Assistant Commissioners, that the Taunton Commission proposed the use of centrally promoted but locally administered examination boards that were felt to be so necessary in encouraging education for the middle classes. The Endowed Schools Bill of 1869 was intended to remedy some of the faults that were brought to light by the Taunton Commission, and to lay the basis for a strong system of secondary education. The first draft of the Bill was considerably fuller than the final form, for the Act served only to remove some of the more blatant malpractices, without organizing a permanent administrative machine to guide education for the middle classes. The first draft of 9 June 1869 was, indeed, arranged in two parts: a 'temporary' and a 'permanent' section.

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[1] Taunton Report, Vol. 7, p. 314 (D. R. Fearon).

[2] Ibid. Vol. 4, p. 698 (The Bishop of Bath and Wells).

[3] Ibid. Vol. 4, p. 865.

[4] Ibid. p. 329.

[5] Ibid. p. 328.

[6] Ibid. p. 334.

[7] Ibid. pp. 330–31.

The 'temporary' section alone was actually to be put into practice. Commissioners were to be named by the Government who were to have power to make 'schemes' for administering endowments, governing schools more effectively, and changing the nature of their studies.[1] There were to be methods of objection and appeal against the schemes.[2] The Taunton Commission had proposed the establishment of provincial bodies to feed such schemes into a central authority, but the Act made no provision for these. The Bill provided for the establishment of a central educational council consisting of members of Oxford, Cambridge and London Universities as well as those appointed by the Crown. Nothing, however, that could be described as an administrative network was established by this first part of the Bill which, in fact, received only slight alterations during its passage through Parliament.

The second part of the original Bill was separated from the first by a Select Committee on 11 May 1869.[3] It lingered on for some while as the Endowed Schools (No. 2) Bill, but its acceptance was repeatedly postponed.[4] This second part of the Bill was concerned with the setting up of a state examination system, under the control of the Educational Council already mentioned in connection with the first part of the Bill.[5] Under the provisions of the second part of the Bill every endowed school was to be open for the examination of its scholars.[6] Masters were to be examined also, and a register kept of suitably qualified teachers.[7] The system was to be extended to cover private as well as endowed schools by registering private schools of a certain standard, and admitting their pupils to the secondary school examinations.[8]

It would appear that this idea of a state-organized examination, originally discussed by the Taunton Commission, was still too advanced for the taste of public opinion at the time. The measure had, however, been 'hailed with pleasure by many of the best masters, both of private and of public schools', as a means of enabling the profession to acquire and maintain its proper position in the country.[9] The 'permanent' part of the original Bill was never to be passed through Parliament, and the only immediate effect of the Schools Inquiry Commission's Report was the establishment of a body of Commissioners to reorganize endowments.

A Select Committee was set up four years after the Endowed Schools Act to investigate its working, with a view to continuing its operation. The Endowed Schools Commissioners had originally been appointed for a limited number of years, and now the time had come to assess whether or not they had been doing a valuable job. Most of the discussion about the Act at the time centred on the schemes drawn up by the Commissioners. That this was yet another field in which patronage and competitive examinations collided may be judged from Cumin's evidence to the Select Committee.[1] Patrick Cumin, then an Examiner at the Education Office, said that children admitted to schools (such as Christ's Hospital) under the older methods of patronage scarcely knew their letters on entry. Competitively selected children, on the other hand, were quite advanced. It was evidence of this sort which could be called in to defend the work of the Commissioners who encouraged the use of examinations. The existing methods of school government, as of selection for entry, were frequently unfair and inefficient.

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[1] Endowed Schools Bill, 1869, Section 9 ff.

[2] Ibid. Section 29 ff.

[3] *Parliamentary Papers*, 1868–69, VIII: *Report of the Select Committee on the Endowed Schools Bill, with the proceedings of the Committee* (Paper 208), 11 May 1869, p. xxi.

[4] *Parliamentary Debates*, CXCIX, 22 Feb. 1870, col. 691.

[5] Endowed Schools Bill, 1869, Section 55 ff.

[6] Ibid. Section 53.

[7] Ibid. Section 54.

[8] Ibid. Sections 58, 63, 64.

[9] *Parliamentary Debates*, CXCVIII, 7 August 1869 (W. E. Forster).

There was an attempt within the Select Committee to reintroduce a central examination organization together with provincial boards, but it failed.[2] It was pointed out in the Committee that the Taunton Commissioners had regarded these administrative devices as almost essential to their purpose, and it was claimed that the evidence of the Endowed Schools Commissioners and others before the Select Committee pointed emphatically to the need for such machinery in addition to that of the 1869 Act. The machinery was never to come in the suggested form. Government interference was probably distrusted by the majority, but perhaps elementary education (following the 1870 Act), and the operation of the Endowed Schools Commissioners in reforming individual schools, already kept public interest at full stretch. The Select Committee agreed to recommend the Government to take up again the matter of the public examination of endowed schools, but no further progress was made.[3]

The Endowed Schools Act had established its Commission in 1869, and this was allowed to continue its work in a slightly modified form for a further year in 1873. The Commission was then merged with the older Board of Charity Commissioners by the Endowed Schools Act of 1874.

The Government failed to implement one of the most important recommendations of the Taunton Report, for no central examination authority of the type envisaged was to appear. Some form of external examination was, however, badly needed, and it was possible for this to be achieved partially and indirectly by the work of the Endowed Schools Commission. Without generally being specific in the choice of external examiner, most of the schemes that were drafted by the Commissioners for endowed schools made outside examination obligatory. Thus, in the scheme for the management of Ilkley Grammar School, in the West Riding of Yorkshire, it was laid down that:

> 'There shall be once in every year an examination of the scholars by an examiner or examiners appointed for that purpose by the Governors, and paid by them, but otherwise unconnected with the school. The examiners shall report to the Governors on the proficiency of the scholars, and on the position of the school as regards in-

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[1] *Report from the Select Committee on the Endowed Schools Act (1869) together with Minutes of Evidence and Appendix*, 17 June 1873 (Paper 254), p. 198.

[2] Ibid. p. xxii.

[3] Ibid. p. xxvi.

struction and discipline, as shown by the results of the examination. The Governors shall communicate the report to the head master.'[1]

The same clause was inserted in almost every scheme for intermediate education, although there were certain variants. Thus, for Sir Andrew Judd's School at Tonbridge, the scheme mentioned specifically the Oxford and Cambridge Schools Examination Board as one of the possible examining bodies.[2] Such arrangements as these must have played a great part in developing the divers secondary school examination systems.

4. UNIVERSITY MATRICULATION EXAMINATIONS

When, in 1911, the figures were published of the secondary school children taking external examinations, it could be seen that more than half of them used the papers of the Oxford Local Examinations Delegacy or of the Cambridge Syndicate.[3] But even as early as 1868, when the Taunton Commission reported, there were many other suitable examinations open to children of that age. Some were not destined to stand the test of time so well, but others were to develop and flourish and make adaptations to meet modern conditions.

Entrance examinations at Oxford and Cambridge Universities lacked the homogeneity that was evident elsewhere. The colleges still maintained a considerable degree of independence from the universities, and this was made manifest in their entrance requirements, as well as in other ways. For matriculation at either of the universities it was only necessary for a candidate to have been accepted by a college or a hall, and to have paid the fee.[4] Many colleges made entrance depend upon the university examinations called 'Responsions' at Oxford, or 'Previous' at Cambridge; these examinations were therefore to be taken both by candidates for admission and by undergraduates in residence who had not previously qualified. They were, however, only for *bona fide* candidates, and can scarcely be described as serving general secondary school purposes. The numbers of entrants, too, were not large. Only 736 individuals sat for 'Responsions' in 1908, while the 1260 candidates for the Cambridge 'Previous' included some who sat for the examination several times in the year.

The matriculation arrangements at London had grown into something very different from these. One examination governed entrance to all the courses, whereas many of the colleges at the older universities set their own entrance tests, shunning even the 'Responsions' or the 'Previous' examinations. More important to the secondary schools, the London University Matriculation Examination was coming to be regarded as a public leaving examination for school pupils, irrespective of whether or not they proposed to enter the University. Evidence given before the Consultative Committee on Examinations in Secondary Schools, which reported in 1911, showed that less than a quarter of the matriculants went on to pass their final university examinations out of the average three thousand who were successful each year between 1903 and 1907.[1]

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[1] *Parliamentary Papers*, XLVI, 1872. Endowed Schools Commission Scheme for the Management of the School at Ilkley, in the West Riding of Yorkshire, Section 57.

[2] *Parliamentary Papers*, LIV, 1880, Section 39.

[3] Cd. 6004, p. 316, Appendix C.

[4] Ibid. pp. 233–40.

The history of London University deserves more than a passing mention if its matriculation requirements are to be understood properly. The poet Thomas Campbell wrote his famous letter to *The Times* in 1825, initiating the formal discussion which led to the foundation of University College.[2] This establishment was known as the University of London for some time after it opened in 1827, though it was not to receive its Charter of Incorporation for nearly a decade, while the title of 'University' was finally to elude it altogether.[3] Opposition to its receiving a charter was considerable, for the College was regarded, quite rightly, as the Dissenters' counterblast to Oxford and Cambridge, then the sheltered seedbeds of the Church of England. King's College, London, the rival establishment founded by Church of England supporters, received its own Charter in 1829. Two colleges had thus come into being, but the lack of a real university was remedied, on paper at least, only in 1836. Two Charters were given in that year, one incorporating University College which was the original foundation of the Dissenters, the other establishing a new body called the University of London, with degree-giving powers and examining functions but little else.[4] Teaching was then to be the province of the two colleges (King's and University College), and of such others as were added from time to time.[5] Examination was the function of the University. The University, though not its colleges, received the financial backing of the Treasury, so that it could later be described as an 'examining agency of Government origin', with something of the status of a Government department.[6]

The later and more liberal idea of a university escaped Robert Lowe, it would appear, as late as 1873. He could say that, 'what I mean by a university is an examining board', a comment which could then bring an immediate retort from others, such as Professor Lyon Playfair, who envisaged broader functions than this one alone.[7] Perhaps it should be remembered that the University of Oxford of Lowe's youth was still only recovering from generations of college dominance, and may have possessed little more than examining functions.

There is evidence to show that the University of London was modelled administratively on that of Cambridge. The Chancellor of the Exchequer, Spring Rice, sent a letter in 1835 to the Chairman of the Council, the Duke of Somerset, suggesting the form of the London University Charter.[8] He proposed to grant a charter to persons eminent in literature and science to act as a board of examiners, and 'to perform all the functions of the Examiners in the Senate House of Cambridge'. In the Charter of the following year a Senate was appointed with the power of naming examiners. University College and King's College were already established entities, with partisan supporters, and a relatively weak university body was the most that could be hoped for. Again, it is worth noting that the colleges of Cambridge were more firmly established than the University at that time. The nature of the examinations at London inclined to that of Cambridge rather than Oxford. Greater reliance was placed upon written papers than upon the *viva voce* that was a feature of some of the Oxford examinations.[1]

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[1] Cd. 6004, Evidence, p. 390, Addendum A.

[2] *The Times*, 9 Feb. 1825.

[3] *The University of London Historical Record, 1836–1926*, pp. vi ff.

[4] *Parliamentary Papers*, 1837, XXXIX. Two Charters.

[5] Supplemental Charter, 1850. The Charters are conveniently brought together in *The University of London Historical Record, 1836–1912*, 1912, pp. 30 ff.

[6] D. Masson: 'London University and London Colleges and Schools of Science', *Macmillan's Magazine*, October 1867, p. 427.

[7] Sir W. Allchin: *An Account of the Reconstruction of the University of London*, 1905, Part 1, p. 555.

[8] Letter of 19 August 1835, mentioned in *The University of London Historical Record 1836–1912*, p. 8.

If University College fitted into an administrative system which was not theoretically dissimilar to that of Cambridge University, its actual operation differed widely from that of its elder counterpart. The 'Godless Institution in Gower Street', as University College was sometimes known, had gained much from the influence of Jeremy Bentham and his supporters. Bentham had earlier outlined his plan for a 'Chrestomathic' school; that is to say, he advocated the teaching of useful knowledge as opposed to the practices of the older universities.[2] London University, and especially its University College were markedly Radical institutions, conjured up to offset the religious exclusiveness and intellectual turgidity of Oxford and Cambridge. It has been shown in the second chapter of this work that the Radicals frequently achieved their ends by encouraging public examination systems, and the history of London University forms no exception to this.

London University was regarded in some circles, at least, as a potentially useful body for testing the abilities of schoolmasters, though a subsidiary means to the training colleges.[3] Doubtless many teachers benefited from its examination facilities over the first few decades, for the number of persons involved increased steadily.[4] In 1858, however, the whole structure was in need of repair and a new Charter was granted. The number of affiliated colleges had risen from two to nearly fifty, but critics had commented that 'every petty school that chose to apply might join'.[5] The same critics, members of a group of graduates who were seeking a share in the government of the University, gave an enlightening account of the weaknesses in the original constitution. The University, they suggested, was strongly influenced at first by Radical theorists who played down the status of academic titles. Self-education was the ideal of these men, and knowledge was the essential, however obtained. The Senate, therefore, which was composed of men too eminent to be able to devote much time to the University, neglected every function but that of examining. Even examining was out of their hands, claimed the critics, because they only exercised the *patronage* involved in appointing examiners; this was an ingenious comment at a time in which patronage was coming under heavy fire in other quarters.

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[1] Letter from J. W. Lubbock to the Earl of Burlington upon the Manner of Conducting the Examinations for Degrees in Arts, 1838, *Pamphlets Relating to the University of London*, pp. 2–5.

[2] J. Bentham: *Chrestomathia*, 1816–17.

[3] E. Edwards: *Metropolitan University; Remarks on the Ministerial Plan of a Central University Examining Board*, 1836, p. 11.

[4] *University of London Historical Record, 1836–1912*, pp. 196 ff.

[5] 'The University of London and Middle-Class Education,' *The National Review*, 1857, pp. 222–30.

The University, by its earlier Charters, was to admit to its examinations candidates who brought leaving certificates from recognized institutions. The value of the degrees was being debased in the 1850s by the admission of mere secondary schools to affiliated status within the University, as the critics showed with devastating clarity. It should perhaps be mentioned that the standards of work among colleges were not so clearly defined then as they were to become later. King's College, itself, was described in an educational guidebook of the period as a place which 'provides a convenient opportunity for employing a year or two of time between leaving school and entry at the [older] universities', and many of its students appeared to have been unaware of the existence of the London University Examinations.[1]

The 1858 Charter admitted graduates to share in the government by establishing the body known as Convocation. The necessity of arts students studying for a minimum of two years at an affiliated college was removed, for, in the face of the affiliation of ever-weaker colleges and schools to member status, the only hope of maintaining a reasonable standard of attainment would have rested on tight control of the colleges by the university body, and that was out of favour in such a liberal period.[2] The University of London became, in consequence, a worldwide examining organ, quite severed from its constituent colleges. Helped also by the initiation of its attractive new Science Faculty in 1860 the number of graduates soared.[3]

It was necessary, from the first, to pass an initial written matriculation examination. The Regulations of November 1839 showed that nine subjects were demanded for matriculation, ensuring a broad and almost encyclopaedic knowledge.[4] Only five subjects were required by 1908, but the papers were generally regarded as difficult, and less than forty per cent of the candidates passed in that year.[5] One of the objections to the use of the examination for secondary school purposes was that it was too inflexible; whole classes were sometimes prevented from entering because only the few ablest scholars were capable enough to attempt the range of subjects.

The reconstitution of the University began afresh with an Act of Parliament in 1898.[6] Three main spheres of action were defined; first came teaching and research, secondly came degree-giving functions to both internal and external students, and thirdly came 'university extension'.[7] The University Extension Board, which began to operate in 1902, took charge of the examination and inspection of secondary schools amongst its other functions, and it was thus intended to remedy the problem of applying university examinations to schoolchildren.[1] The scheme which was passed by the Senate in 1902 allowed for the introduction of the 'School Leaving Certificate (Matriculation Standard)', and the chief innovation was the University's insistence upon inspection of the schools that were participating. Closer cooperation was thus ensured between the schools and the University, and the schools were thenceforth to receive the formal blessing of the University in a way similar to that of the schools connected with Oxford and Cambridge under their 'school' examination schemes. The London University examination was only open to pupils of two years' standing, in inspected schools. A Junior School Certificate was added in 1903, and a Higher School Leaving Certificate in 1905; the one below, and the other above the Matriculation level.[2]

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[1] J. E. Thorold Rogers: *Education in Oxford, its Method, its Aids and its Rewards*, 1861, pp. 18–19.

[2] Sir W. H. Allchin: op. cit., Part I, p. 12.

[3] *University of London Historical Record, 1836–1926*, pp. ix and 13.

[4] University of London Regulations for Matriculation, November 1839.

[5] Cd. 6004, pp. 196–99.

[6] University of London Act, 1898.

[7] Statutes made for the University of London by the Commissioners appointed under the University of London Act, 1898.

All of these examinations were based deliberately on the requirements for school-leavers of various ages. The lowest examination catered for those leaving at fifteen years of age who would otherwise have taken the examinations of professional bodies such as the Pharmaceutical Society. The middle examination was for leavers at about the age of seventeen, and it allowed them to enter the University without further testing. The most difficult examination was for those who continued at school for a year or two after the Matriculation Examination.[3] The total number of candidates increased rapidly, so that by 1908 there were more than one thousand taking the 'school' examinations annually.[4] The requirements for entry to the University were, however, relatively inflexible, and therefore difficult; the choice of subjects was limited. Although this rigidity may have been felt to be necessary for University entrants, it still did not meet the demands of the secondary schools. The middle examination required almost precisely the same combination of passes as the Matriculation Examination itself, and at the same level. Secondary schools were likely to change to the Oxford and Cambridge Local Examinations, with their wide choice of subjects, unless the system at London was made more elastic.[5] A new set of regulations in 1910, therefore, introduced the London 'Senior School Examination' to replace the School Certificate Examination. A much wider choice of subjects was allowed, while matriculation requirements could still be observed by insisting upon the passing of the correct combinations of subjects for university entrance.

The Higher School Leaving Examination was found to be shunned in practice, as boys of eighteen usually preferred to sit for the external 'Intermediate Examination' of London University instead.[6] Unlike the Matriculation Examination, the 'Inter' was part of the degree course itself.

Even with the concessions that were being offered to secondary schools, in the form of specially arranged examinations, teachers were allowed to take little part within their own schools. Only in the Junior Examination was the school expected

[1] Statutes, Sections 36–39.

[2] The Annual Regulations of the University of London Schools Examination Board. These are conveniently summarized in Cd. 6004, pp. 383–87.

[3] Cd. 6004, p. 384.

[4] Ibid. p. 391, Addendum B.

[5] Ibid., Evidence, p. 386.

[6] Ibid. p. 242.

to provide its own syllabus; questions set on this were formulated by the examiners.[1] In English literature, alone, did the school staff set the paper, because of the wide variety of possible approach. Here, too, the university inspector acted as examiner, but the marks received were not allowed to count towards a certificate. It was a feature of nineteenth-century examination systems that the initiative and the power were kept closely in the hands of the examiners rather than the teachers. Teachers did not participate when external examinations began first in connection with the older universities. On the other hand, by 1911, nine out of ten examiners for the London University Junior School Examinations were stated to have been teachers in secondary schools while, in the two higher examinations, the proportion was greater than one in two.[2] It may be seen that teachers, as a class, were not being excluded from examining by London University in the first decade of the twentieth century as they had been in the Oxford and Cambridge Local schemes originally. They even had the option of having their own special papers set in the matriculation-level examinations, though they took little advantage of it, perhaps because of the expense.

1,500 entered for the three London University School Examinations in 1908–09, compared with another 6,700 who took the London Matriculation Examination in the ordinary way.[3] Lists of successful Matriculation candidates were to be found in a supplement to the University Gazette, placed alphabetically in two divisions after 1903. The competitive honours list was published with names in order of merit before 1903, and prizes were awarded upon the results.[4] Class divisions and orders of merit, were inherited from the early university honours systems; the accent upon competition slipped out of fashion with the incidence of 'school' examinations. Distinctions were still to be awarded to the foremost in each subject, and honours to the best all-rounders, but that which was suitable for the ablest few in a school could not fairly be extended to whole classes of pupils, where there might be excessive strain upon individuals.

The numbers entering for the various School and Matriculation examinations of the London University far exceeded those of the other modern universities in 1908.[5] The numbers of candidates attending the matriculation examinations of Durham, Birmingham, Bristol and the University of Wales, for example, were in each case much less than a thousand. The examinations in such universities, it may be surmised, were more often taken by intending university students than was the case at London. School examinations and university inspection were being developed at Durham and Birmingham, but these systems were still in their infancy at the time.[6] Only the examinations of the Northern Universities Joint Matriculation Board could begin to compare with those of London University in this period, with over 2,500 candidates annually.

This Northern Universities Joint Matriculation Board was formed to assess the ability of entrants to Manchester, Liverpool, Leeds and Sheffield Universities, and it began its operations in 1903.[7] It really continued the work of the former Victoria

[1] Cd. 6004, pp. 204–7.
[2] Ibid., Evidence, p. 388.
[3] Ibid. p. 16.
[4] Ibid. p. 198.
[5] Ibid. p. 353, Appendix E.
[6] Ibid. pp. 216–19.
[7] Ibid. pp. 209–16.

University of Manchester, before this federal institution was fragmented. Secondary schools prior to 1903 were using its matriculation examination more for local authority scholarship purposes than as leaving examinations.[1] Progressive opinion at the time was calling for the institution of 'school' examinations to cater for secondary school-leavers, and arrangements were made for this by the Northern Board in 1910, together with a scheme for university inspection on the familiar pattern.

James Petch has shown in greater detail the way in which the Northern Joint Board's examinations grew out of the Preliminary Examination of the Victoria University, an institution which had developed in the 1880s.[2] It is interesting to note that some of the arrangements between the University and its colleges were similar to those of London and Cambridge at certain times in their development. Although at Cambridge the University had been supreme in the Middle Ages, the colleges had later taken over power. At London and at the Victoria University several of the colleges had been founded before the university, leading to only a weak federal authority when integration took place. Examinations were an important link in such a situation. The Victoria University was entitled to inspect and examine schools by its Charter, and its 'school' examination could be likened more to the Cambridge Previous Examination than to a 'school' examination of the later type.[3]

5. SOME OTHER EXAMINING BODIES

The account given thus far of school-examining bodies might leave an impression of homogeneity and order that would be quite erroneous. It is necessary, therefore, to sketch briefly the development of some of the other authorities involved in examining at a secondary-school level.

The Oxford and Cambridge Schools Examination Board, frequently known as the Joint Board, was founded in 1873.[4] The state-controlled examinations proposed in the first draft of the Endowed Schools Bill of 1869 had encouraged the Headmasters' Conference to come into being in the following year. Powerful independent schools thus attempted to safeguard their interests in the face of state interference. The Conference favoured the Government's scheme at first, but later decided to invite the cooperation of the two ancient Universities, to which many of their leavers proceeded.[5] The Joint Board that was formed by Oxford and Cambridge thus set itself apart from, and presumably above, the work of the local examination boards in the middle-class schools. In that candidates were entered by their schools, and not as individuals, this Board set 'school' examinations, though the papers were common to all schools.

The examinations at first were for eighteen-year-old sixth-form boys, but girls were admitted in 1879. A Lower Certificate Examination for sixteen-year-old pupils followed in 1884, while the Joint Board swung into line with other bodies in 1905, by instituting a School Certificate of the common type. The Joint Board, therefore, differed from the 'local' bodies mainly in its origins and initial methods. The chief distinguishing feature at a later date was that the majority of the candidates came from public schools.

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[1] Cd. 6004, Evidence, p. 393.

[2] J. A. Petch: *Fifty Years of Examining*, 1953.

[3] Ibid. pp. 21–22.

[4] *Report of the Royal Commission on Secondary Education*, 1895, Vol. 5, p. 277.

[5] Cd. 6004, pp. 14–15.

A completely different purpose lay behind the origin of the Central Welsh Board. The Welsh Intermediate Education Act of 1889 enabled the secondary schools thereby created to be brought under an examining body that really owed its origin to the pressure of Welsh enthusiasts and patriots.[1] The examination was closely linked with inspection by executives of the same Welsh Board. The arrangement of certificates was somewhat different from those of the English examining bodies, even in 1911.[2] Certificates were given at Junior, Senior, Higher and Honours levels, but children who were not candidates for certificates were also allowed to be entered for examination. Facilities existed for commercial and technical examinations to be taken, but such courses failed to prove popular in Wales at that period. Because their function was to inspect the work of the school rather than to examine and grant certificates, it had originally been the custom for the inspectors to test the work of the school at every level. The magnitude of this task soon proved to be excessive, and the examination of the lower forms was dropped.[3] Cooperation between examiners and teachers was virtually non-existent at the beginning of the twentieth century. This may have been partly due to the suspected difficulty of maintaining the confidence of bodies accepting the Welsh certificates for entrance purposes, but more likely it was because of the difficulty of ensuring fairness in a situation in which the examiners not only tested the pupils but also inspected the schools on behalf of the central authority.[4] The system lost some of its provincial eccentricity by the end of the First World War and was shortly afterwards taken under the wing of the Secondary School Examinations Council.[5] It was a regional or provincial examining body of a similar type to that which was envisaged in connection with the 1869 Endowed Schools Bill.

The College of Preceptors was founded by teachers in 1846, 'for the purpose of promoting sound learning and of advancing the interests of education, more especially among the middle classes', according to the Royal Charter of Incorporation in 1849.[6] This purpose was largely achieved by examinations, first of teachers themselves, and soon afterwards of the pupils that they taught. An experimental examination within one school at Nottingham in 1850 showed the way.[7] A full-scale examination system began to operate by 1854, to test the pupils and to give parents and teachers some standard of comparison. It was originally intended that the examinations should be carried out by the teachers themselves, in their own schools, with the College Examiners adding their own questions, and generally seeing fair play. This policy was abandoned in 1853 when it came to be realized that parents would not place so much trust in an examination in which a teachers' organization assessed the work of teachers.[1] It would appear that public opinion expected examinations still to compare the work of schools. At the time of the Consultative Committee Report of 1911 the teachers did not participate at all in their own examinations, the examinations being administered centrally, the local agents being other respectable persons, and often neighbouring clergymen.[2]

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[1] The Welsh Intermediate Education Act, 1889, Section 3.

[2] Cd. 6004, p. 219. [3] Ibid. pp. 402–3. [4] Ibid. p. 410.

[5] *The School Certificate Examination, being the Report of the Panel of Investigators appointed by the Secondary School Examinations Council to Enquire into the Eight Approved School Certificate Examinations held in the Summer of 1931*, p. 146.

[6] Taunton Report, Vol. 4, p. 1.

[7] College of Preceptors. *Fifty Years of Progress in Education*, 1896, pp. 13–14.

The numbers of candidates rose slowly to just over 1,000 annually in 1863, but then grew rapidly to 17,000 in 1893.[3] A decline followed as the newly-established Preliminary Local Examinations of Oxford and Cambridge syphoned off some of the potential candidates. The bitterest blow to the College, however, was the steadfast refusal of the Board of Education to recognize the use of the College examinations in the same way that it did university examinations. The Board of Education policy of forbidding candidates within grant-aided secondary schools to take external examinations under the age of fifteen was matched by its failure to allow College of Preceptors examinations to give exemption from entry to training colleges.[4] The one thing that an examination system needed at the beginning of the twentieth century, if it was to continue to flourish, was recognition by influential public bodies, and this was withheld. Even the Secondary School Examinations Council, it will be shown later, needed to spend many years negotiating with universities and professional bodies over recognition, and the College of Preceptors was far less powerful an organization. With Board of Education backing, however, the College of Preceptors could have regained the influential position that it had once held.

One of the least satisfactory aspects of the College of Preceptors' examinations in the nineteenth century was the excessive detail in which the results were printed. The class lists in *The Educational Times*, the College publication, were at three levels, being intended chiefly for children under eighteen, under sixteen and under fourteen, though entry ages were less than these on average.[5] Distinctions and honours were given, and the names of successful candidates were published in order of merit.[6] Only in the Lower Forms Examination, initiated in 1895, at a lower level, was there less discrimination.[7]

A scheme had been drafted in 1894 for the inspection of schools by the College, and this was revised in 1902.[8] The College was never involved in this work on a large scale, and carried out few inspections after 1902.[9] It would seem that the word 'inspection', latterly at least, was taken to describe what was more frequently termed a 'school' examination. In a 'school' examination, it will be recalled, one or more examiners came in person to visit the school and report upon it as independent experts, possibly to give a Certificate Examination the personal touch.[1] The Board of Education was permitted by Statute to recognize 'any University or other organization' for the purposes of inspecting secondary schools.[2] Recognition of the College was withheld here again, however, as it was with the examinations, and the decline of this institution was implicitly assisted. Rejected by the new Board of Education, it will be shown how the College was later ignored at the institution of the Secondary School Examinations Council and was again deprived of official recognition.

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[1] Cd. 6004, p. 398, referring to the College's pronouncement in Nov. 1850.

[2] Taunton Report, Vol. 4, pp. 10–11.

[3] Cd. 6004, p. 396.

[4] Ibid. p. 397.

[5] Taunton Report, Vol. 4, p. 9.

[6] Cd. 6004, p. 223.

[7] College of Preceptors. *Fifty Years of Progress in Education*, p. 37.

[8] Cd. 6004, p. 400.

[9] Ibid. p. 227.

Professional examinations for children of secondary school age abounded in the second half of the nineteenth century, and weighed heavily upon the schools at a time when it was less the fashion to accept equivalent examinations as entry qualifications than it became later. This chapter has been confined to a study of the more numerically important examinations that attempted to stimulate a good general education. Smaller examination systems that lasted only a short while, or were numerically insignificant, or were directed towards technical or professional ends have been omitted. It would be more fruitful to be reminded of the fact that almost 17,000 children of secondary school age took Civil Service Examinations in 1908; this was a number that dwarfed any of the smaller examination systems.[3] The effect of the Civil Service Examinations upon the schools was considerable. The Incorporated Association of Headmasters underlined this in 1896 by adding that at least ten times as many people were affected by the examinations as entered for the competition.[4]

The Civil Service Examinations were unsatisfactory from the point of view of the schools, and considerable reform was necessary. Schools had to pay careful attention to such examinations at least as late as 1913, to discourage their pupils from leaving early for a cramming course.[5] It was only when the professional bodies and the Civil Service Commissioners came to accept the examinations under the Secondary School Examinations Council as being equivalent to their own, that the full benefit of the reform of the examinations could be felt.

6. CENTRAL COORDINATION

The secondary school examination systems that began to spring up after 1850 proliferated to such an extent that they interfered with one another by the early twentieth century. There was overlapping, if not competition, among examination centres of different origin within the same district.[6] The expense of having large numbers of centres was too great. There was always the temptation, too, for schools to enter their better pupils for one examination after another.[7] One examining body would frequently fail to recognize the examination of another for qualifying purposes, for the system of 'equivalents' was yet to be fully organized.[8] The Consultative Committee of the Board of Education had considered ways of ensuring co-ordination among the various systems when it issued its first Report on the subject in 1904.[1] Nothing concrete resulted from these recommendations, and it was only when the Board of Education backed up the fuller investigation that had preceded the 1911 Report that progress was made.

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[1] Cd. 6004, p. 227.

[2] Board of Education Act, 1899, Section 3 (1).

[3] Cd. 6004, p. 9.

[4] Ibid. pp. 8–9.

[5] C. W. Bailey: *Steps Towards Educational Reform*, 1913, p. 79.

[6] Cd. 6004, p. 311, Appendix B.

[7] Ibid. p. 39.

[8] Ibid. p. 38.

The examinations had started at a time when the variety of secondary schools was considerable, and when their independence, and the liberal attitudes of the times, made a tighter control of curricula than that of an external examination system, difficult to envisage. Coordination of the curricula could only have come otherwise with a more direct central control of the secondary schools themselves.

The position began to change with the excursion of the new Board of Education and the local education authorities into the field of secondary education after the Acts of 1899 and 1902.[2] Even from the beginning, the examining boards connected with the universities came to be favoured by these bodies, in comparison with others such as the College of Preceptors. Inspection rights were granted to university boards under Section 3 (1) of the Board of Education Act, 1899.[3] Inspection was regarded as an antidote to any improper use that might be made of external examinations in certain quarters. Indeed, there was for some while a difficulty in balancing the claims of inspection and external examination.[4] Both inspection and examination systems were designed for testing and promoting the efficiency of schools, and there was a tendency for official opinion to oscillate from favouring one to favouring the other method.

The position was even more fluid at, the time of the Bryce Commission Report, in 1895. Inspection was primarily advocated by witnesses who wished to emphasize education as opposed to training as the aim of the schools. Such persons stressed the importance of the *viva voce* examination, particularly for juniors, and this could only be carried out by inspection.[5] Teachers generally favoured the universities as agencies for this, but themselves desired to influence the examinations more than was then customary.[6] The foundation of a central educational authority for examinations was again discussed, but progress was hindered by dissension between those who wanted a broad and those who wanted a specialized examination.[7] It was at this stage, in 1895, that future central policy emerged. The Bryce Report commented that a central office should regulate but not conduct examinations.[8] Such a central office should, it was suggested, correlate the examinations of the many examining bodies, and arrange for these to be accepted as entrance qualifications by the Civil Service Commissioners, the professional examining bodies, and others.

The Board of Education promoted this policy cautiously itself, although no central office was to appear for some years. The Board made it possible for certain suitable examinations, 'of a leaving examination type', to be recognized as qualifying tests for those pupils in secondary schools who wished to enter training colleges for teachers.[1]

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[1] Ibid. p. 141.

[2] Education Act, 1902, Part II. Board of Education Act, 1899.

[3] *Report of the Board of Education for 1902–03* (Cd. 1763), pp. 98 and 63.

[4] *Report of the Board of Education for 1908–09* (Cd. 5130), p. 45.

[5] *The Royal Commission on Secondary Education. Report of the Commissioners*, (C. 7862) 1895, p. 166.

[6] Ibid. pp. 166–67.

[7] Ibid. pp. 162–63.

[8] Ibid. pp. 304–5.

The College of Preceptors' examinations did not figure in the 1910 Board of Education Statistics, presumably because they were taken by the private rather than by the state-aided secondary school scholars. The College of Preceptors had suffered in some ways from being too far ahead of its time. An essential part in the success of the Oxford and Cambridge local examinations in the first fifty years of their existence was played by the examiners and their local agents, who appeared to the candidates as university men of a different order of education. Their impartiality was not doubted in distinguishing between candidates, as the impartiality of the College of Preceptors was said to be doubted at the time of the Taunton Report.[2] An Assistant Commissioner was of the opinion that the College's lack of prestige was its chief handicap, for the average teacher in a private school was not in the same class as an Oxford man.[3] Later, when teachers were beginning to wish to participate, or at least to have a greater say in the organization of examinations affecting secondary schools, they were frequently at the disadvantage of having to interfere in the business of another group of men associated with the universities, whose established system affected their work but was originally designed for a different purpose.

A teacher, writing in 1913, echoed the feelings of many when he called for more reliance to be placed upon teachers as a class when it came to examining the pupils.[4] He advocated the employment of the specialist teachers in the large urban grammar schools as examiners, and suggested that the school records of a pupil's progress be brought into use. He felt that the arrangements of the London University Extension Board and the Northern Universities Joint Board were indicative of the final solution, in that the Northern scheme gave teachers representation on the examining board together with the university staff, while teachers were encouraged to act as examiners under the London scheme. Professional opinion in Liverpool, claimed the writer, favoured the deployment of school and university teachers as internal and external examiners respectively. The advantages gained would include an increase in the morale and interest of the teachers, the encouragement of local educational unity, an addition to the dignity of the teaching profession, and the avoidance of an unnecessary increase in outside control. The Board of Education might be brought in to decide upon which of the external examinations should be taken in the smaller rural grammar schools, with their staffs of three or four 'general practitioners', but it was the writer's intention that the urban schools should be firmly associated with their local university.

Many responsible teachers were eager for a greater share in examinations not only because of the better status that was implied, but because the existing public

[1] *Board of Education, Educational Statistics, 1910–11* (Cd. 6338), p. 82.
[2] Taunton Report, Vol I, p. 331.
[3] Ibid. Vol. VII, p. 379 (D. R. Fearon).
[4] C. W. Bailey: *Steps Towards Educational Reform*, 1913, pp. 86–90.

examinations were not always felt to be suitable.[1] Thus, teachers criticized the custom of using class-lists in order of merit in publishing the results of secondary school examinations.[2] These positions were largely used for unjustifiable advertisement, they stated, for certain schools were still sufficiently unscrupulous to enter their ablest pupils for one examination after another. The academic honours thus obtained looked well enough on a prospectus, or in a local newspaper.[3] The class lists derived from the earliest days of the public examinations, when competition was held to be the principal stimulus. Further back still, they derived from the honours schools of the older universities. Competition had played its part in stimulating the schools, but at the beginning of the twentieth century it was felt to have distasteful byproducts, and it was to fade away to some extent in the face of opposition from teachers and others. It was coming to be realized, too, that competitive examinations lost some of their edge when they were taken by candidates in the mass.[4] The Consultative Committee in 1911 favoured a qualifying, and not a competitive examination.[5]

The fate of secondary school examination systems lay in the balance during the decade before the First World War. It was a time of deliberation, as the central education authority cautiously nosed its way forward. It has already been mentioned that inspection and examination were possible alternative instruments for the control and inspection of schools and the assessment of pupils. Another alternative existed in the form of a 'school record', for the business of assessing a pupil's ability. When the Consultative Committee looked into matters affecting higher elementary education in 1906 they advised against the use of external examinations, and in favour of this new method.[6] The higher elementary schools were described as being 'end-on' to the elementary schools, unlike the secondary schools which came under different regulations as far as the Board of Education was concerned; the curriculum that was recommended had a more practical bias. It was felt by the Consultative Committee that, while a liberal education at a secondary school culminating, say, with a Cambridge Junior Local Examination was suitable for young persons intending to continue their studies further, the same course was not the best one for those at a higher elementary school. A closer connection with the employers was advocated, with a certificate that was to act as an 'educational passport' in other districts for all pupils who completed the course satisfactorily. An internal school examination might be utilized if necessary, but external examinations were frowned upon. The basis of the idea seems to have come from the use of the *livret scolaire* in French schools.

A similar scheme was later proposed in the Consultative Committee Report of

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[1] *The Royal Commission on University Education in London. Appendix to the Fifth Report of the Commissioners*, (Cd. 6312) 1912, Minutes of Evidence, qu. 15144.

[2] C. W. Bailey: op. cit., pp. 86–90.

[3] Cd. 6004, pp. 44–46.

[4] *The Educational Times*, 1901, pp. 132–33.

[5] Cd. 6004, p. 121.

[6] *Report of the Consultative Committee upon Questions Affecting Higher Elementary Schools*, 1906, p. 50.

1911, for early leavers in secondary schools. It was suggested that those who left school at fifteen with a satisfactory record might be awarded a 'Secondary School Testamur'.[1] A school record system had many advantages, but it placed reliance upon the teachers who were sufficiently close to their pupils to be in danger of being influenced by personal or private motives. Opposition would continue to exist until teachers could develop a professional respectability comparable, say, to that of medical doctors. While an examination system tested the pupils, it also tested the efficiency of the schools themselves, and this the school record system could never do. For many years, however, the higher elementary schools were to remain without external examinations, relying instead upon inspection and some form of school record. The secondary schools were not so closely under the domination of the Board of Education, and they continued to use external examinations, and to attach great importance to them. The basic principles behind the emerging developments had been summed up in 1895 by the Bryce Commission in the following words:

> 'The first thing to ensure is that there should be a public guarantee of efficiency; and the second, that there should be the largest possible liberty both to teachers in regard to their methods and plans, and to governing bodies in regard to the educational aim and scope of the various schools.'[2]

The proposals of the Consultative Committee of 1911 were subject to criticism on social principles; many felt that entry to the professions would be barred to all save those who had attended a secondary school and taken the proposed School Certificate.[3] Some provision for early leavers has already been mentioned, in the form of a 'Secondary School Testamur'. It was also proposed that an equivalent examination for other than secondary school candidates should be held, yielding a certificate possibly called the Secondary Education Certificate to distinguish it from the School Certificate.[4] Marshall Jackman disagreed so strongly with his colleagues over such matters that he declined to sign the Consultative Committee Report. He made clear his views in a note, claiming that the poorer sections of the community would be barred from the professions because the best that they could hope for in the way of qualification would be a Secondary Education Certificate, or a 'Testamur', and that these would be considered below the standard of a School Certificate.[5] The rest of the Consultative Committee had appreciated the dangers of this, but had hoped to overcome the difficulty in other ways. It was suggested that the number of bursaries should be increased to secondary schools, that the Free Places or Scholarships should be made transferable and that candidates from schools not recognized by the Board of Education might be allowed to compete for the School Certificate.[6] It cannot be claimed that the recommendations did anything very effective to draw together the secondary and the elementary school systems.

The Board of Education encouraged certain of the secondary school examination boards by using their examinations for training colleges' entrance purposes. It will be shown how it also brought pressure to bear by issuing regulations which tended to discriminate in favour of the University examining bodies. Other forces were acting in the same direction. The Education Committees of the West Riding, Norfolk, Middlesex, Surrey and Swansea began to arrange for schools under their care to come under one examining and inspecting authority only, for purposes of simplification and efficiency.[1] This move reflected the central policy of condensation, whereby the number of examining bodies was to be reduced. Other local authorities laid down their own rules of conduct to combat the too frequent use of examinations, particularly at an early age.[2] The 1904 Secondary School Regulations forbade the external examination of pupils in their first two years at aided schools.[3] By 1907, no pupils might be examined until they had reached the age of fifteen.[4] Professional bodies and associations of teachers registered their own approval of this attitude at conferences and meetings.[5] Such facts as these discouraged encroachment by the examination systems on the schools, which were thus freed from the multiplicity of examinations which had been threatening to choke them. The junior examinations of all the examining bodies became rapidly less popular.[6]

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[1] Cd. 6004, pp. 150-51.

[2] Cd. 7862, p. 161.

[3] Cd. 6004, pp. 142 ff. Marshall Jackman.

[4] Ibid. pp. 110–11.

[5] Ibid. pp. 142–47.

[6] Ibid. pp. 110–11.

Board of Education control over schools other than the grant-aided was limited to the endowed schools. After 1899 the Board was able to take over the initiation of schemes for endowed schools from the Charity Commissioners.[7] It became the practice of the Board either to insert a clause in the Articles of Government which made examination by a university or other examining body compulsory, or to insist upon adherence to Article 35 of the Board's Regulations for Secondary Schools.[8] Article 35 stated that:

> 'The Board may at any time require that such portion of the school as they may think fit shall be submitted for examination to an Examining Body approved by them for the purpose. Pupils under fifteen years of age may not, except with the express permission of the Board, be presented for any other external examination except one comprising the whole school, or held solely for the award of scholarships or exhibitions, or held in accordance with a scheme made under the Endowed Schools Acts or the Charitable Trusts Acts.'

Although the annual examination was not insisted upon, it is clear that some definite central control was established.

The recommendations of the Consultative Committee on Examinations in Secondary Schools, in 1911, were based on three principles.[9] First it was suggested that external examinations and inspection should be linked, and current methods of inspection modified, to include more individual examination of the pupils. The term 'interview-examiner' was mentioned, and a larger inspectorate was felt to be required, with a local organization; but these ideas did not survive the First World War. Secondly it was suggested that the multiplicity of examinations should be reduced; some steps had already been taken in this direction. Thirdly, the principle was reaffirmed that secondary schools should provide a sound basis of liberal education up to the age of sixteen. These three principles, already aired in the Bryce Report of 1895, were developed after 1911.

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[1] Cd. 6004, p. 56.

[2] Ibid. p. 57.

[3] *Board of Education Regulations for Secondary Schools, 1904* (Cd. 2128), p. 19.

[4] *Board of Education Regulations for Secondary Schools, 1907* (Cd. 3592), p. 13.

[5] Cd. 6004, p. 58.

[6] Ibid. p. 56.

[7] Board of Education Act, 1899, Section 2.

[8] Cd. 6004, pp. 60–61.

[9] Ibid. pp. 103–4.

The Board of Education invited the universities to discuss proposals based on the 1911 Report in December 1912.[1] It was intended to use several of the existing secondary school examining bodies in the scheme that was being prepared. The Board of Education issued a Circular in 1914 which made its plans more formal, and was designed to provoke comment from interested bodies.[2] Schools receiving grants were to be examined annually by one of the university examining bodies recognized by the Board of Education, while other schools might also take these examinations.[3] Two sorts of examinations were envisaged, one for pupils of about sixteen years of age, and one for those of eighteen.[4] 'Pass' and 'credit' standards were proposed in the former, enabling the universities to use the secondary school examinations for matriculation purposes with flexibility.[5] The second examination provided more specialized papers than the first, which was intended to encourage a good general education.[6] Many passages in the Circular had a familiar ring. Thus, 'the form and not the individual should be the unit', and, 'the standard for a pass should be such as may be expected from pupils of reasonable industry and ordinary intelligence in an efficient secondary school'.[7] It was proposed to bring teachers into touch with the examining bodies 'either by representation on the examining body or by a system of consultation'.[8] It was felt, too, that they should be able to submit their own syllabuses if necessary, and also estimates of their pupils' performances, for borderline cases. The function of the central coordinating authority was to fix the standards of pass levels, and to maintain a general oversight, without undermining the powers of the component examining bodies.[9] That this was insufficient to satisfy some of the keener reformers was apparent from a letter in *The Times Educational Supplement* in 1917, which stated that too much power was left in the hands of the existing boards, who were interested in maintaining the *status quo*.[10]

The First World War interfered with the immediate application of these ideas, and the Board postponed action in 1915.[11] The Secondary School Examinations Council was finally established in 1917 to advise the Board of Education.[12] It was to have the general coordination and oversight of secondary school examinations as its function and was composed of twenty-one members. Ten of these represented the university examining bodies, five the local authorities, and six the teachers. At first the Oxford and Cambridge Joint Board, the Oxford Local, the Cambridge Local, and the Northern Universities Joint Board were included, together with

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[1] *The School Certificate Examination*, 1931, p. 9.

[2] *Board of Education Circular No. 849*, July 1914.

[3] Ibid. Sect. (i).

[4] Ibid. Sect. (ii).

[5] Ibid. Sect. (v).

[6] Ibid. Sect. (vii).

[7] Ibid. Sect. (iv).

[8] Ibid. Sect. (ix).

[9] Ibid. Sect. (x).

[10] J. Wertheimer, Letter to *The Times Educational Supplement*, 31 May 1917.

[11] *Board of Education Circular No. 933*, 1915.

[12] *Board of Education Circular No. 996*, 1917.

Boards of the Universities of Durham, Bristol and London.[1] Two or three years later the Central Welsh Board was also represented on the Council.[2] From 1918 onwards the numbers taking the Government-approved examinations were published in the Board of Education annual reports.[3] The Secondary School Examinations Council was soon busy negotiating with the universities over their matriculation requirements in 1920.[4] Similar meetings were held with representatives of professional bodies, the Civil Service Commission, and teachers' organizations, to persuade them to accept the new 'School' and 'Higher School' Certificates in lieu of their private qualifications. Three years later it was announced that such bodies as the Royal College of Physicians and Surgeons, the Chartered Institute of Secretaries, the Royal Institute of British Architects, and the Surveyors' Institute, had agreed to accept the examinations for their own purposes, while similar arrangements had already been announced in Circular 1166.[5]

The part to be played by teachers in the new secondary school examinations had developed considerably by 1914, when Circular 849 was issued by the Board of Education. From being without any control of the examination system in 1858, central policy encouraged teachers to make representations to the examining authorities on the suitability of questions, and to be represented on the examination boards on equal terms with other members.[6] It was also suggested that teachers' estimates should be used for assessing borderline cases, as they had been used by the Northern Universities Joint Board since 1910.[7] In such ways as these, school teachers gradually began to exert a greater influence upon the examinations in secondary schools.

The developments at the time of the First World War enabled the university examining bodies to be brought under a widely representative Examinations Council; this set standards and coordinated the examining boards, with their variety of origin and purpose. The alternative arrangements of a state-organized examinations board, or of a system of provincial examining boards were put aside, and the development of the grammar and public schools between the Wars was left largely in the hands of the Secondary School Examinations Council and its powerful 'recognized examining boards'.[8] The State benefited from the prestige of the universities; central action in reforming the examinations was not overwhelming, but it was sufficient to remedy many of the defects of the existing system.

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[1] *Board of Education Circular No. 1034*, 11 March 1918.

[2] '*The School Certificate Examination*', 1931, p. 146.

[3] *Report of the Board of Education, 1918–19* (Cmd. 722), p. 38.

[4] Ibid. p. 76.

[5] *Report of the Board of Education, 1923–24* (Cmd. 2443), p. 81.

[6] Cd. 6004, p. 120.

[7] J. A. Petch: op. cit., p. 129.

[8] Cd. 6004, pp. 132–35.

CHAPTER FOUR

Technical Education

1. THE MECHANICS' INSTITUTES

Technical education, in the modern sense, only became necessary after the Industrial Revolution, that period at the beginning of the nineteenth century in which the nation's economy was transformed and society thrown into a turmoil. Most skilled occupations before this time were handicrafts, passed down by practice and systematic instruction from man to man.[1] In the course of the Industrial Revolution, skill was transferred from the craftsman to the engineer who designed the machine. Skilled workers were to be replaced by machine-minders, and men were to be herded into factories and towns. Life in the mills and workshops became increasingly more repetitive, and the traditional method of apprenticeship lost its purpose because of this.

Such a trend was not observed at the time without alarm, and certain steps were taken to provide the education which would act as a substitute for apprenticeship, or which would provide basic education at a variety of levels. James Hudson, writing in 1851, described how illiterate adults flocked to the Sunday schools at the beginning of the century in rural as well as in urban districts.[2] Schools and institutions of all descriptions were established for the purpose of educating the working man, usually with the backing of philanthropically minded gentlemen. Anderson's Institution, in Glasgow, was founded in 1796, and Dr George Birkbeck, who was appointed Professor of Natural Philosophy three years later, began to develop a course of scientific instruction suitable for artisans and mechanics.[3] Mechanics' societies were established in London, Glasgow, Liverpool and Haddington for educational purposes in 1817.[4] Articles were written on the foundation of literary and philosophical societies in *The Monthly Magazine* of 1814, reflecting another aspect of the desire for adult education.[5] It was not, however, until the new Mechanics' Institution was formally established in London on 2 December 1823, that public attention began to focus on such developments.[6] It was at this time of comparative prosperity that Henry Brougham wrote in *The Edinburgh Review* to support the resurgence of interest in adult education.[7] Thomas Kelly has shown the growing need for a simple basic training in scientific theory in his book about

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[1] A. Abbott: *Education for Industry and Commerce in England*, 1933, pp. 5–22.

[2] J. W. Hudson: *The History of Adult Education*, 1851, pp. 2 ff.

[3] T. Kelly: *George Birkbeck*, 1957, pp. 20–36.

[4] J. Hole: *An Essay on the History and Management of Literary, Scientific, and Mechanics' Institutions*, etc., 1853, p. 8.

[5] *The Monthly Magazine*, 1814, Part 1, e.g. pp. 507–10.

[6] J. Hole: op. cit. p. 5.

[7] 'The Scientific Education of the People', signed William Davies; *The Edinburgh Review*, Oct. 1824, pp. 96–122 (mentioned in J. Hole: op. cit. p. 8).

George Birkbeck, describing the mechanics' institute movement as an educational reflection of the Industrial Revolution.[1]

Such apparently diverse establishments as the Liverpool Mechanics' and Apprentices' Library, founded in 1823, and the Edinburgh School of Arts, founded in 1821, were results of the same demand.[2] Mabel Tylecote has shown that, although philanthropists and the more humane masters of industry tended to support mechanics' institutes, particularly in the large towns, many institutions were founded independently by artisans.[3] The origins of the movement were characterized by their variety.

The honour of having founded the original mechanics' institute has been disputed at length in most of the standard books on the subject. It is only necessary, for the purposes of this work, to note that institutions were to spring up rapidly after 1823. In 1824 they appeared at Aberdeen, Dundee, Leeds, Newcastle, Alnwick and Lancaster, with many more to follow in the ensuing years. There were 610 institutes in England by 1850, and twelve in Wales; altogether there were 600,000 members.[4]

Brougham's article on *The Scientific Education of the People* in 1824, did much to stimulate action. He asked that workmen eager to further their studies should be given the opportunity, while affirming that all should have the chance to improve their basic education. Although Brougham's aim was to teach the principles behind the machinery of the factory, some institutions concentrated more upon a general education, or upon the direct improvement of skill in a certain trade.[5] The movement would have flourished more fully had the elementary education machinery been more efficient. Any work of an advanced nature, on a large scale, was hampered by the illiteracy of the poorer persons who were in need of basic instruction in reading and writing before normal communication might even begin. By the 1850s the mechanics' institutes were catering very largely for the middle classes rather than for the artisans or mechanics for whom they were founded.[6]

Under the system of factories and mechanics' institutes emerging at the beginning of the nineteenth century, the employer relieved himself of the duty of training his employees that he had previously borne.[7] Training for a job was now much briefer, and the burden of broadening the opportunities for the masses came to be carried by philanthrophists, mainly by voluntary effort. The mechanics' institutes aided the parents in training ambitious young workers, while the State, it will be shown, had its own part to play. At the beginning of the nineteenth century it was generally held that the complete training of workers comprised, first, practical experience in the workshop, and, secondly, theoretical instruction in a mechanics' institute.[8]

One of the most influential institutions of its kind was the Edinburgh School of Arts. Students were encouraged to attend regular courses after 1835, in which year the directors began to examine their progress.[9] Successful candidates were given a certificate which entitled them to life membership of the School. Three years' attendance was necessary for such a certificate, with one-year courses in mathematics, chemistry and natural philosophy made obligatory. 'Attestations of Proficiency' were awarded at the end of each annual course of lectures to suitably able and diligent persons, after 'strict examination'. Only forty-six persons had succeeded in gaining Diplomas of Life Membership by 1850, but thirty-eight obtained Attestations in this last year.

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[1] T. Kelly: op. cit. pp. 56 ff.

[2] J. Hole: op. cit., p. 7.

[3] Mabel Tylecote: *The Mechanics' Institutes of Lancashire and Yorkshire before 1851*, 1957, p. 59.

[4] J. Hole: op. cit. pp. 9–10.

[5] A. Abbott: op. cit. p. 13.

[6] J. W. Hudson: op. cit. p. vii.

[7] A. Abbott: op. cit. p. 22.

[8] Ibid. p. 23.

[9] J. W. Hudson: op. cit. pp. 77–78.

The certificates awarded at Edinburgh were one stage more advanced than the premiums or prizes awarded by the Society of Arts in London. Meritorious discoveries and inventions, and other worthwhile achievements, had been rewarded by the Society of Arts with medals or grants of money since its foundation in 1754.[1] The mechanics' institutes at Glasgow, Newcastle and Devonport made awards on the same principle, though with little visible effect.[2] The Edinburgh School of Arts was referred to as a model by writers such as James Hole, who advocated the introduction of a general system of examinations.[3] A possible means of extending examinations over a wider area arrived with the unions of institutions that were formed from the 1830s onwards, chiefly as an economic means of establishing regular 'circuits' of lecturers, and thereby overcoming the shortage of able teachers.[4] These unions did not flourish so well in the South as they did in the North, where the Union of Lancashire and Cheshire Institutes, established in 1839, later developed examining functions.[5] When James Hole, the Secretary of the Yorkshire Union, wrote his Prize Essay on the Mechanics' Institutions for the Society of Arts, in 1853, he proposed the establishment of a nation-wide Union of Institutes.[6] Examiners appointed by such a body would, he stated, give confidence to 'certificates of proficiency' awarded on a similar principle to those of the Edinburgh School of Arts. The usual plan in institutes was to give occasional prizes, a scheme which was said to breed ill-feeling among the pupils.[7] It will be shown how a comprehensive system of examinations, of the magnitude of that envisaged by Hole, came to be established by the Society of Arts in 1856, in connection with a London Union of Institutions which had its source in the Society.

The mechanics' institutes did not generate systems of examinations individually to any great extent. They nevertheless contributed towards forming the nature of the examinations that they were to utilize later. Hole showed that the aims of Brougham, of the Directors of the Edinburgh School of Arts, and of others, were for artisans to learn the principles behind the trades, rather than to learn the trades themselves.[8] This aim reappeared, both in the examinations of the Society of Arts and in those of the Science and Art Department. The pity of it was that artisans generally lacked the basic education to profit from the courses in the institutions and from the examinations that were provided for their use. Clerks and shopkeepers benefited rather than industrial workers.

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[1] H. T. Wood: *A History of the Royal Society of Arts*, 1913, p. 235.

[2] J. W. Hudson: op. cit. p. 85.

[3] J. Hole: op. cit. p. 63.

[4] J. W. Hudson: op. cit. pp. 175–88.

[5] A. Abbott: op. cit. p. 80.

[6] J. Hole: op. cit. p. 157.

[7] Ibid. p. 62.

[8] Ibid. pp. 14–17.

2. THE ROYAL SOCIETY OF ARTS

The Society of Arts was founded in 1754, being an association of gentlemen interested in promoting art, industry, commerce and invention by granting rewards and premiums.[1] This work was to continue to a limited extent, but the first flush of enthusiasm had passed by the end of the century, and the system of prize-giving became less and less effective.[2] £24,616 was disbursed between 1754 and 1778, of which £23,552 was awarded in money prizes, the remainder being spent on medals.[3] The work of the Society was to extend in other directions.

One of the best-known works carried out by the Society was the promotion of the Great Exhibition of 1851, a project that was taken over by the Government.[4] This came in a period when there was a resurgence of interest in technical education as a factor in national industrial performance. The Society began to play an important part in the work of mechanics' institutions at the same time.

In 1848 the Society resolved that any mechanics' institute within fifteen miles of London should be entitled to join for the same subscription as an individual, so that its members might enjoy certain of the advantages of membership.[5] The system was extended further after a Conference in May 1852, when it was suggested that the Union of Institutions should be formed. This was agreed by a resolution of the Council of the Society in the following July, in order to increase the efficiency of metropolitan mechanics' institutions. The object was to enable the scattered institutions to cooperate, and thus strengthen their educational powers. Other symptoms of contemporary concern for education included the Society's Report on Industrial Instruction in 1853 and a large educational exhibition organized in the following year. The conference of representatives of institutions became an annual affair until it was finally discontinued in 1875.

An important development from this Union was the Society's examination system. The founder of the Union, Harry Chester, suggested the establishment of a system of examinations for the benefit of members of the affiliated institutions, in December 1853.[6] Sir Henry Trueman Wood, the historian of the Society of Arts, was of the opinion that the Union, with the Society's examinations, paved the way for the later state organization of technical education by encouraging the establishment and growth of educational institutions.[7] The local institutions, encouraged by Government grants, grew into science and art schools and classes, and the whole edifice of twentieth-century further education rested upon such foundations. Others claimed more than this. The Chairman of the Council of the Society of Arts stated in 1863 that the University Local Examinations originated from a suggestion of one of the Society's examiners that the Universities should do for the middle classes what the Society was doing for the lower classes.[8] It will be shown how the technological examinations of the City and Guilds of London Institute were to grow directly out of the Society's examinations.

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[1] H. T. Wood: op. cit. p. 235.
[2] Ibid. pp. 244–45.
[3] Ibid. p. 22.
[4] Ibid. p. 401.
[5] Ibid. pp. 369–72.
[6] Ibid. p. 372.
[7] Ibid.
[8] *Journal of the Society of Arts*, 1863, p. 5 (W. Hawes).

The examinations of the Society of Arts started badly in the Spring of 1854. So ambitious, and so elaborate and comprehensive was the syllabus that only one candidate could be induced to enter.[1] The project soon came under the hand of Dr James Booth, whose name may be remembered in connection with his earlier writings on a system of national education and Government examinations.[2] Booth, now Vicar of Wandsworth, was Chairman of the Society's Board of Examiners in 1856. This Board remodelled the syllabus to include such topics as book-keeping, arithmetic, geometry, English history, English literature, French and freehand drawing, there being eighteen subjects in all. Sixty-two candidates came forward in that year, and the examinations were taken at Huddersfield in the following year, as well as in London. A more comprehensive system of local examination committees had to be arranged in 1858, with the papers channelled through the central office, and this principle was still maintained in 1913 when the number of candidates examined annually had risen to 30,000.[3] The old tradition of giving rewards to the able was revived by awarding prizes to the sum of one hundred guineas in 1857.[4]

James Booth was an ardent advocate of examinations: he felt that all the other functions of the Society of Arts were outdated.[5] He lectured and wrote pamphlets in support of the Society's examinations, and advertised the benefits that might be obtained from them.[6] One of the arguments that he used in their defence was that learning had become increasingly bookish and that new techniques were necessary. University lectures were now so out of fashion, he stated, that professors at Oxford and Cambridge could almost be said to hold sinecures.[7] Furthermore, experience over the years showed that proficiency was most effectively promoted by periodic examination rather than by mere attendance at lectures. He could quote the experience of the Universities, the Inns of Court, the East India Company, the Colleges of Physicians, Surgeons and Apothecaries, the various Government Boards, and the Committee of the Privy Council on Education, for this was in the 1850s, the decade when examinations became fashionable.

The Council of the Society of Arts, of which Booth was so important a member, had to define the nature of its examinations. In admitting pupils from commercial and trade schools, it was intended that these tests should be confined to a certain class of persons. Bearing in mind that it was the original function of the examination system to encourage systematic study and punctuality of attendance among the students at mechanics' institutes, it was agreed by the Council in 1856 that no one should be allowed to enter for the examinations who had not been for six months a member of a mechanics' institute, school, or other body in union with the Society.[8] University graduates, undergraduates, students of learned professions, certificated schoolmasters and pupil-teachers, were all barred from sitting, as were children below the age of fifteen. None might take more than three subjects. Boys from purely classical schools were specifically excluded. An impending collision with the College of Preceptors, which was already examining children at a similar level, was avoided by this reappraisal of the Society's functions.[1]

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[1] H. T. Wood: op. cit. p. 426.
[2] See Chapter 2.
[3] H. T. Wood: op. cit. p. 426.
[4] J. Booth: *How to Learn and What to Learn*, 1856, p. 59.
[5] *Journal of the Society of Arts*, 1857, pp. 5–8.
[6] J. Booth: op. cit. p. 59.
[7] Ibid. pp. 21–22.
[8] Ibid. pp. 58–59.

The original Board of Examiners was impressive, including men of the calibre of Thomas Huxley.[2] It may have been usual in this period to enlist the support of such eminent people to generate confidence in a new organization rather than to make use of their help in actually examining candidates. It will be recalled that the Exeter examination described in the last chapter could also boast an impressive list of examiners. The majority of these men must have been too busily involved in public life to be able to devote much time to any regular examining. The Council of the Society of Arts superseded the Board of Examiners in 1857, and appointed paid examiners.[3]

One or two clerkships in Civil Service offices were placed at the disposal of the Society in 1864, to act as prizes to encourage the examinees. The Prince Consort's Prize of twenty-five guineas was awarded between 1862 and 1879 to the candidates obtaining the largest number of first-class certificates in four consecutive years, and this served a similar purpose.[4] The competitive possibilities of the examination system were not neglected in the mid-nineteenth century and there were several dozen other prizes in 1858, some to the value of £10.[5] Booth's move to award the title of 'Associate of the Society of Arts' to successful candidates was, however, defeated.[6]

The examinations soon developed a strong commercial bias which was to remain with them for many years. Shorthand was introduced as a subject in 1876, and typewriting in 1891, as the demand for these skills dictated.[7] Clerical and professional workers were naturally attracted, particularly as few other examinations were available at the time to cater for this class of student. The tendency to encourage commercial courses was exaggerated by the growth of the Science and Art Department's examination system, which frequently duplicated the other examinations of the Society. It was because of this that the Society abandoned drawing as an examination subject in 1860, while seventeen out of thirty-six subjects were struck off the Society's list in 1870.[8] One might have been excused at the time for imagining that the competition of a state organization, aided, as it will be shown, by a 'payment by results' scheme, was about to finish the examinations of an independent body such as the Society of Arts. This was not to happen, however, for office work was expanding, demanding skills which were not immediately within the scope of the Government's examining machine. The Society was a less ponderous organism than the Science and Art Department, and it was capable of adjusting itself to changing circumstances. Indeed, this free-lance behaviour was always a feature of the Society's work. The Society acted as a catalyst to state action and also, being more flexible, it could cater quite rapidly and effectively for a changing demand.

[1] H. T. Wood: op. cit. p. 428.

[2] J. Booth: op. cit. p. 56.

[3] H. T. Wood: op. cit. p. 432.

[4] Ibid. p. 433.

[5] *Journal of the Society of Arts*, 1858, p. 414.

[6] Ibid. 1857, pp. 5–8.

[7] H. T. Wood: op. cit., p. 431 n.

[8] Ibid. p. 428.

Certificates were given for passes in single subjects from the very beginning of the examinations, for it was this type of course that was favoured by students in mechanics' institutes. 'Commercial Certificates' were also awarded after 1876 for passes in three subjects. These were intended to encourage students to participate in courses that were more satisfactory on educational grounds, but they never became very popular.[1] Guidance and pressure on the Society from the mechanics' institutes began to peter out in the 1870s, at which time certain changes in the form of the examination were suggested. The Council considered establishing a system of technological examinations in 1871 to replace the general examinations that were current, and a resolution was passed to this end.[2] Some of the institutions concerned raised objections, however, and the existing arrangements were continued for a few years longer. There came a time when the Society's examinations appeared to have outlived their usefulness, when both the City and Guilds of London Institute and the College of Preceptors competed for candidates with the Society to some extent, to say nothing of the Science and Art Department. The Society's examinations were not held at all in 1881.[3] Certain institutes protested again, so it was decided to make a new start in the following year.

The examinations were thrown open to everybody in 1882, and the Union of Institutions disappeared, as one of its very reasons for existence had been removed.[4] The new examinations were required to be self-supporting, so fees were demanded of candidates, and the only important concession given to adult students in evening classes was that the idea of a 'Commercial Certificate' was abandoned, and single subject certificates were again officially encouraged.[5] The number of candidates which had risen steadily from 288 in 1858 to 2,325 in 1880, fell drastically to 695 in 1882. By 1890, however, there were 2,474, and by 1900, 9,808, an increase perhaps explained by the municipal initiative made possible by the Technical Instruction Act of 1889. This Act permitted local councils to support technical education, including that which did not qualify for the central grants of the Science and Art Department. Commercial work was doubtless popular, and many of the students taking the Society's papers came from the local authority colleges and classes.

So popular did the Society's papers become that 23,803 were taken under a new scheme started in 1905, compared with 9,808 in 1900.[6] The 1905 Regulations made examination success possible at any of three stages, two classes of pass being obtainable in the two higher stages.[7] This replaced the former system of examinations designed mainly for commercial purposes; certain very elementary tests which had been set whenever necessary since 1856 were discontinued at the same time.

There were about 30,000 candidates in 1911, and the numbers increased as fresh examinations were set at different times of the year.[8] More than 150,000 were involved annually by 1953 and there were 800 examining centres in Great Britain and Ireland, almost all of them under the control of the local education authorities.

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[1] H. T. Wood: op. cit. p. 433.

[2] Ibid. p. 432.

[3] Ibid. p. 434.

[4] Ibid. p. 372.

[5] Ibid. pp. 432–34.

[6] D. Hudson and K. W. Luckhurst: *The Royal Society of Arts 1754–1954*, 1954, p. 258.

[7] H. T. Wood: op. cit. pp. 434–35.

[8] D. Hudson and K. W. Luckhurst: op. cit. pp. 258–59.

More recent aspects of the work of the Society will be treated in a later chapter, though the superintendence of the London examinations had been taken over by the London County Council as far back as 1912.[1] A factor influencing the growth in popularity of the Society's examinations, apart from the increased demand for properly qualified employees, was the decay of the Science and Art Department examinations at the beginning of the century. This will be described in the next section.

The connection of the Society with the development of technological examinations was brief but important. It has already been shown that mechanics' institutes provided an education intended to form the background of a worker's technical skill. The Society's policy, too, reflected this view. Thus, technical education was defined in 1868 by a Committee of the Society as, 'general instruction in those sciences the principles of which are applicable to various employments in life.[2] The Report of this Committee mentioned that technical education 'should be deemed to exclude the manual instruction in Arts and Manufactures which is given in the workshop'. Presumably it was intended that the employer should be required to provide that final part of a worker's instruction directly applicable to his employment. The Society did make a move away from its original idea of a general education by suggesting higher courses of study of special significance to certain trades. Programmes were sketched out for miners, chemical manufacturers, civil engineers, and others, in 1868.[3] Captain (later General Sir John) Donelly proposed introducing technological examinations to the Council of the Society in November 1871.[4] He repeated his views in 1873, urging that artisans should be tested on a knowledge of their particular industry.[5]

This last idea bore fruit. It was arranged for examinations to be held in connection with the May examinations of the Science and Art Department; before a candidate obtained a certificate from the Society he was required to pass the Department's examination in certain specific subjects. The Science and Art Department papers provided the theoretical background, to say nothing of the grant on the results of its examinations. The Society acted to focus the students' work in one particular industry, behaving in its traditional freelance manner, stepping in to meet the need of the moment.

Only six candidates entered in 1873, but by 1878, when the City and Guilds of London Institute removed the burden of examining from the Society, there were syllabuses to cover such employments as cotton, paper and silk manufacture, and carriage building; hundreds of students were involved.[6] Certificates were given at elementary and advanced levels, as they were by the Science and Art Department.

3. CENTRAL AID AND PAYMENT BY RESULTS

State policy in aiding technical education was as tentative at first as it was for elementary education. A Select Committee on Arts and Manufactures sitting in

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[1] H. T. Wood: op. cit. p. 436.

[2] *Journal of the Society of Arts*, 1868, p. 627.

[3] Ibid. p. 628.

[4] H. T. Wood: op. cit. p. 466.

[5] Ibid. p. 437.

[6] Ibid. p. 438.

1835 reported on the state of applied art in this and in other countries.[1] Witnesses could state that it was design rather than manufacture that was the weakness at this stage, and they could draw unfavourable comparisons between scientific education for the 'middling classes' in this and in Continental countries.[2] Schools of art and design were felt to be necessary, provided by the Government in the German style, with branch schools in the provinces. The Government School of Design was accordingly established in 1837, to bring the quality of designs in this country up to the same level as the technical standard of its manufactures.[3] A grant of £1,500 was made, being the first state aid for post-elementary education of this sort in England, and the project was kept in the hands of the Committee of the Privy Council for Trade, which had initiated the scheme.

It was decided to extend this scheme in 1841 by arranging for the institution of four provincial schools of design, and £10,000 was made available for this purpose.[4] It was clear from the note accompanying the Estimates that the Government intended the central school to nourish its provincial offspring, both with a supply of teachers and with collections of models and casts. Central aid was dispensed in the form of annual grants for the training and payment of teachers, the purchase of apparatus and the preparation of models, in addition to capital costs.

Another Select Committee Report in 1849 showed some of the unsatisfactory features of what might be termed the experimental period. Criticisms were made of the relationships between the Board of Trade, the Committee of Management, and the masters of the central School of Design.[5] The want of proficiency at an elementary level was noted in recruits to the central and provincial schools, for the extension of drawing facilities at mechanics' institutes needed to be encouraged. Above all, a rationalized administration was wanted, and this was to come after 1852.

The motivation to rectify this situation was provided by the Great Exhibition of 1851 which showed that British products were not so very much better than foreign ones. Memorials from the leading citizens of large towns were sent to the Royal Commissioners for the Exhibition, urging that profits be spent upon education relevant to manufacturing.[6] Prince Albert's own interest in the matter was publicized, and lectures were delivered by prominent educationalists and others on the advantages to be obtained from education in science and in art.[7] Dr Lyon Playfair's lecture on industrial instruction on the Continent was representative of the concern that was felt.[8]

The Government's remedy was linked with the foundation of the Department of

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[1] *Report from the Select Committee on Arts and Manufactures*, 1835.

[2] Ibid. Evidence, J. Morrison, Qu. 165 ff.

[3] *Estimates for the Year Ending 31 March 1837. Parliamentary Papers*, 1836, XXXVIII, pp. 435–36.

[4] *Estimates for the Year Ending 31 March 1842. Parliamentary Papers*, 1841, II, pp. 169–70.

[5] *Report from the Select Committee on the School of Design*, July 1849, pp. iv–vi.

[6] *Second Report of the Commissioners for the Exhibition of 1851*, 1852, Appendix C, pp. 48 ff.

[7] Ibid. Appendix G, pp. 72 ff.

[8] Ibid. Appendix E, pp. 60 ff.

Practical Art in 1852, as an office of the Board of Trade.[1] Seventeen schools were scattered over the British Isles at that time, and three in London; all received part of their income from the Government, part from fees, and part from local sources.[2] The Government aimed at concentrating its assistance by establishing one, or a very few, advanced schools, leaving the provision of elementary instruction to local exertion.[3] Direct support for the provincial schools was gradually withdrawn, and local committees were left to appoint new masters and to make bargains with them over their salaries. Central aid was focused on training teachers, free of charge, at the main London school, and on encouraging them to qualify by a system of certificates, which were connected with a minimum salary.[4] Local art schools were expected to provide cheap training for the artisan class, at sixpence per week for each student, and also to join in the instruction of national school children. One of the conditions for the establishment of a school of art was that there should be three elementary schools available locally which would agree to receive one or more drawing lessons each week, paying £5 a year for the privilege.[5] The masters of the local schools of art, their assistants, or the schoolteachers themselves if properly qualified, were to give the lessons.

Sixteen schools of art were claimed to be independent of central grants by 1854, though nineteen other provincial schools were still being subsidized.[6] No less than ninety provincial schools were fanned into existence by 1864 by the method which supplanted the more straightforward provision of design schools by the Government.[7] It would appear from the First Report of the Department of Science and Art which replaced the Department of Practical Art in 1853 that even the teachers preferred their income to derive from pupils' fees rather than from Government grants. A statement made by a master at the Leeds School showed that he welcomed the scope for initiative open to him when his fixed salary was lowered and he was obliged to make up his income by fees received for instruction.[8] James Hole, the Secretary of the Yorkshire Union of Mechanics' Institutes, echoed the same attitude in 1853. He criticized the Government's earlier method of subsidies but praised the stimulation of local and voluntary effort, drawing a comparison between 'day work' and 'piece work' in factories and businesses.[9] He felt that mechanics' institutes should be aided, but should not be in competition with Government Schools. He cited the 1843 Report of the Yorkshire Union of Mechanics' Institutes which had made the same point earlier. It may appear strange to hear about persons in the provinces objecting in principle to a central injection of money and resources which seemed likely to remove all difficulties of finance at a local level. Such was the temper of the times, however, and the stage was slowly being set for that ultimate in apparent efficiency, the system of 'payment by results'.

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[1] *Estimates for the Year Ending 31 March 1853. Parliamentary Papers*, Class IV, pp. 10–17.

[2] Ibid. pp. 18–19.

[3] *Report from the Select Committee on Schools of Art*, July 1864, p. iv.

[4] *First Report of the Department of Practical Art*, 1853, Appendix III, p. 86.

[5] Ibid. p. 9.

[6] *First Report of the Department of Science and Art* (C.1783), 1854, p. xxiii.

[7] *Report from the Select Committee on Schools of Art*, 1864, p.v.

[8] C.1783, p. xxxv.

[9] J. Hole: op. cit. pp. 101–3.

The need for scientific instruction resulted in the establishment of the Department of Science and Art in March 1853, again a consequence of the Great Exhibition. The schools of design were brought together with such other Government institutions as the recently founded School of Mines and the Museum of Practical Geology, for mutual action and cooperation, and for the benefit of local and voluntary bodies.[1] The way was being laid open for giving Government assistance to local bodies such as mechanics' institutes.

The Science and Art Department, pursuing a policy of stimulating teachers into action instead of supporting them financially, had intimated to the Committee of Council on Education that some pecuniary value should be placed upon the power of teaching drawing.[2] The Education Office concurred very largely with this proposal, suggesting at first small prizes for successful pupil-teachers in their annual examinations. Additional bonuses of £1 were to be given to certificated instructors for each such pupil, up to a maximum of £3. Furthermore, it was proposed to use the art examination in assessing a young teacher's grade of certificate.[3] The former of these suggestions illustrates the birth of 'payment by results'. An exhibition of work was arranged, with medals for the best entries. The Department could thus claim that a system of public examinations had been instituted, and proposed to develop this feature in future.[4]

The Government did not elect to establish or fan into existence schools of science in the same way that it had introduced schools of design or schools of art. It was felt necessary to cultivate primary instruction in the subject first.[5] Large towns were already erecting schools of science. Aid was therefore concentrated first upon training teachers, as it had been earlier in the elementary schools and art schools.[6] Central policy in this direction emerged clearly in a Minute of 2 June 1859, entitled 'Aid to Science Instruction'.[7] It was made plain that the Science and Art Department, now linked with the Committee of Council on Education under one Vice-President, would augment the salaries of qualified science teachers in a scheme similar to that used for elementary school teachers. First-, second- and third-grade teachers would receive £20, £15 and £10 respectively. In addition, payments were to be made to the teachers on the results of Queen's Prizes awarded to successful students. A first-class prize-winner earned his teacher a £3 reward; £2 was awarded for a second-class and £1 for a third-class prize. The system of rewards to teachers of art was based on similar principles, and was already operating. Lingen's detailed suggestions to Cole in 1853 were thus made concrete, and the system of payment by results was operating in the Science and Art Department before its extension to the elementary schools with the 1861 Revised Code.

The courses of scientific instruction felt to be suitable by the Science and Art

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[1] C.1783, pp. ix–x.

[2] Ibid. p. 93. Letter from Henry Cole to R. R. W. Lingen, 12 July 1853.

[3] Ibid. pp. 94–95.

[4] Ibid. p. lxi.

[5] Ibid. p. xxx.

[6] *Second Report of the Science and Art Department* (C.1962), 1854–55, Appendix C, pp. 34 ff.

[7] *Sixth Report of the Science and Art Department* (C.2502), 1859, pp. 13 n ff.

Department were in the rudiments of practical and descriptive geometry, with mechanical and machine drawing and building construction, physics, chemistry, geology and minerology (applied to mining), and natural history. Other subjects were to follow in the course of time.[1] It was clearly intended to encourage their teaching in mechanics' institutes and other locally provided classes, many of which were drifting rather aimlessly by the middle of the century.[2] The provision of a few schools of navigation was the only sign in the period of a more direct Government action in founding institutions at that level.[3]

The examinations for awarding certificates to teachers of science were held from 1859 onwards in London, Edinburgh, Dublin and Manchester, under officers of the Department.[4] Examination papers for the science classes themselves were first set two years later. Much of the work was left to local committees who superintended the Department's examinations, the tests being held simultaneously throughout the country in a way which was to become so common in public examinations. The number of science teachers who qualified rose from 43 in 1859 to 137 in 1865, and the Department could claim that about 470 certificated teachers had obtained their instruction by 1866 without any cost to the country in training such as might have been incurred under the old design school method.[5] The scheme was successful, too, in increasing the number of aided classes from 9 to 120 between 1860 and 1865, and there were 5,479 successful students in this last year. A further 2,663 were examined who were not under instruction from certificated teachers, and were thus ineligible for grant. These entered privately and may even have been self-taught. Special examinations for teachers were abolished in 1867.[6]

There was still a lively concern with the state of English technical education and this was stimulated by the succession of international exhibitions. Dr Lyon Playfair could write yet another letter about the Paris Exhibition in 1867, in which scarcely a dozen out of the ninety classes indicated British preeminence.[7] But by now, the numbers benefiting from the education encouraged by the Science and Art Department were beginning to grow. It was found necessary to decrease the proportional payment for each successfully instructed candidate to prevent the amounts disbursed from becoming unduly large.[8] The 'payments by results' machinery was adequate in initiating a great national development, but the rates of reward were not intended to be immutable. The mode of operation of the Science and Art Department's scheme for first educating the teachers could be likened to that of a chimney stack, by which a small fire is fanned by natural convection into a roaring furnace. Just as the rising warm air generates a draught, so the qualification of a few persons soon resulted in the education of thousands.

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[1] *Thirteenth Report of the Department of Science and Art* (C.3649), 1866, Appendix A, p. 13.

[2] T. Kelly: *George Birkbeck*, 1957, pp. 207–77.

[3] *Sixth Report of the Department of Science and Art* (C.2502), 1859, p. 11.

[4] C.3649, pp. v–vi.

[5] Ibid. pp. vi–vii.

[6] *Fifteenth Report of the Department of Science and Art* (C.4049), 1867–68, p. vii.

[7] *Fifth Report of the Commissioners for the Exhibition of 1851*, p. 118. Letter from Dr Lyon Playfair, 15 May 1867.

[8] C.3649, p. vii.

The Science and Art Department turned itself into a vast examining organism, with ramifications in many directions. Thus, a competitive aspect appeared in the examinations of science classes when exhibitions were awarded to the School of Mines and to the College of Science in Dublin.[1] The large national competition for students in schools of art resulted in hundreds of awards being made at every level, ranging from 9,491 '1st grade prizes' to 124 'National Medallions'.[2] Payments were made to schools of art on these results from 1857 onwards. The tentacles of the Department extended into the training colleges for teachers, where 2,329 persons were examined in 1865.[3] The Department could state that the numbers taught altogether through its agency in that year amounted to 103,588, though the bulk of these were children learning drawing in the elementary schools.[4] Even so, this was a remarkable achievement, and showed how powerful examinations could be when linked with a central grant system. The arrangement was, it will be shown, more successful in initiating a scheme of education than in running it through its period of maturity.

From the first, central aid was made available for morning and evening classes in science and art.[5] Later, and for purposes of economy, it was only given in respect of 'adult artisans' or their children.[6] These were precisely defined, though in a reasonably generous fashion, in succeeding official publications, the purpose being to limit central aid and direct it where it was most needed. The New Schedule published in 1865 showed a very detailed system of grants being paid to the managers of schools and classes on account of artisans, pupil-teachers, and teachers successful in Science and Art examinations.[7] Special arrangements were made on a similar basis for 'night classes in mechanics' institutions' and for 'schools for the labouring poor'.

The mechanics' institutes, and certain other local bodies in receipt of Science and Art Department grants, were mainly attended in the evenings. Central grants to full-time day schools became more common after 1872. The more enterprising school boards established after the 1870 Education Act began to create 'Higher Grade' or 'Seventh Standard' Schools to give instruction that was really of a secondary nature; this received a Parliamentary grant after pressure by the local boards.[8] 'Ex-Standard Schools' were also formed for education at a slightly higher level. Such schools, and voluntary schools also, looked for support to the Science and Art Department grants, and it could be stated in 1895 that the upper departments of elementary schools depended upon them.[9] This was understandable when, under the 1893 Regulations, payment by results ranged from £2 for a pass at an elementary level to £8 for a first-class honours success, and when attendance payments in day and night 'organized science schools' brought in only £1 and ten shillings respectively.[10]

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[1] C.3649, p. vii. [2] Ibid. p. xi. [3] Ibid. p. xii. [4] Ibid. pp. x and xi.

[5] *Second Report of the Department of Science and Art* (C.1962), 1854–55, Appendix C, p. 34.

[6] *Twelfth Report of the Department of Science and Art*, 1865, Appendix A, p. 1.

[7] C.3649, Appendix A, pp. 24–26.

[8] *Royal Commission on Secondary Education. Report of the Commissioners* (C.7862), 1895, p. 10. (The Bryce Report.)

[9] C.7862, p. 11. [10] Ibid. p. 27.

Science and Art grants were intended to stimulate instruction where it was conspicuously necessary; they were not designed to control a nationwide system of education. The emergence of higher grade elementary schools made some special arrangement desirable if the pupils were to be shielded to any extent at all from the narrow and onesided syllabus that derived from addiction to such a scheme of tests and rewards. Schools of a certain standard were recognized as 'organized science schools', and later as 'schools of science', with a capitation grant added to the 'payment by results' grant after 1872, to ameliorate the situation and to make the schools a little less dependent on the successes of the scholars.[1] These regulations, which applied to evening as well as to day schools, and to classes as well as to schools, were hoped to encourage methodical instruction. One of the conditions for a capitation grant was that the course should last for at least three years, and that there should be a certain level of attendance. 'Payment by results' continued, however, and warped the curriculum in schools, for literary subjects were not open to grants and were therefore neglected almost entirely. The attendance grant was raised in the 1893 Regulations, while the Regulations of 1895 swept away the 'evils of payment on results and of written examinations, and (encouraged) literary subjects'.[2] A central grant was based thenceforth partly on attendance and partly on the results of inspection. This allowed literary subjects to be encouraged, as inspectors could insist on a balanced curriculum. When the new rules came into force in 1897, organized science schools were required to devote at least ten hours weekly to literary subjects, as opposed to those leading to the Science and Art examinations.[3]

'Payment by results' went out of fashion completely at the end of the century. The grant system was changed radically between 1896 and 1898 to one which gave grants on attendance and in proportion to the number of pupils in inspected schools or classes.[4] Only successful honours candidates were still eligible to earn a grant on their examination results. At the same time, the restriction of central grants to the 'industrial classes' was removed. Captain Abney, the Director of Science at the South Kensington headquarters, claimed that the new regulations would defeat any tendency for cramming, and aid practical work in subjects such as chemistry, which were difficult to test.[5] As for the examination system itself, this was to continue for a while, but in a way unrelated to the grant system.

4. LOCAL INITIATIVE

A Royal Commission reported on Technical Instruction in 1884, and recommended that school boards or local authorities should be empowered to establish, conduct, and contribute towards the maintenance of classes under the Science and Art Department.[6] The Commissioners investigated the need for further technical education in England, and made extensive comparison with foreign countries. One of the results of the Report was the 1889 Technical Instruction Act, by which any county or borough council, or urban sanitary authority, was enabled to levy a penny rate for technical instruction.[1] Education higher than the elementary, which had already been aided locally to a slight extent in the higher grade schools or the organized science schools, now came further within the scope of local authorities. Local initiative was encouraged in the next year by the 1890 Local Taxation (Customs and Excise) Act. Technical instruction was named as one of the purposes to which money paid to the local authorities from the National Exchequer, in respect of beer and spirit duties, might be applied.[2] The financial independence given to local committees enabled them to provide a little support and patronage for education other than that earning a central grant, and to cater for persons who were not technically artisans.[3]

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[1] *Twentieth Report of the Department of Science and Art*, 1873, Appendix A, pp. 1–3.

[2] C.7862, p. 28.

[3] *Forty-Second Report of the Department of Science and Art*, 1895, Appendix A, p. 6.

[4] *Forty-Fifth Report of the Department of Science and Art*, 1898, p. xi.

[5] Ibid. pp. xii–xiii.

[6] *Royal Commission on Technical Instruction, 1882–84. Second Report*, Vol. 1, 1884, p. 537.

Grants were made available to schools, colleges and classes by the county councils and other local authorities after 1889. Some came in the form of maintenance grants, given annually, and others as capital grants for building and equipment. General secondary schools were not barred from receiving county help. Thus, county grants were given to schools in Cheshire providing that at least twenty-five per cent of the pupils took a Science and Art examination.[4] Surrey County Council required aided pupils to work for a university 'local' examination, and Leicestershire empowered itself to use examinations as a condition for giving aid under the technical instruction scheme. The 1889 Act catered well for those higher elementary schools that were principally financed by the Science and Art Department, but whose buildings were provided out of the local rates. There were sixty of these schools in 1894, of which thirty-nine were 'organized science schools'; there were fourteen other elementary schools with higher classes receiving a central grant.[5]

Such schools as these tended to give a general training in science, in accordance with the theoretical bias of the Science and Art Department's examinations. Under the Technical Instruction Acts the municipal schools and mechanics' institutes could become rather places of special technical instruction, related to certain trades or manufactures.[6] This was made possible by a somewhat generous interpretation of the words 'technical instruction' by the Science and Art Department towards the end of the century. The Department allowed such diverse topics as banking, bookkeeping, seamanship and singing to be organized locally by 1895, though these did not qualify for a central grant.[7] On the other hand, there were no classes at the time for plumbing, textiles, dyeing, or shoe manufacture, and so assistance was rather patchy. The weakness of the Science and Art Department as a central authority for secondary education, which was what it had become to a large extent, was that it could only reward certain subjects in the curriculum of a general secondary school. English literature and the classics were well outside its field. The lack of a clear and regulated connection between the Department and local authorities mattered perhaps less in the case of technical instruction for adults than it did in secondary schools for adolescents. Many of the higher grade schools, being subject to inspection and examination both by the Elementary Education and by the Science and Art Departments, were said to suffer from a chronic examination fever in 1895, notwithstanding the impending changes in the grant regulations.[1]

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[1] Technical Instruction Act, 1889, Section 1.

[2] Local Taxation (Customs and Excise) Act, 1890, Section 1.

[3] A. Abbott: op. cit. pp. 41–43.

[4] C.7862, p. 33.

[5] Ibid. p. 53.

[6] Ibid. p. 55.

[7] Ibid. p. 28.

The recommendations endorsed by the Royal Commission on Secondary Education in 1895 were to have far-reaching results. The policy was fully developed of having a central authority which supervised rather than controlled the secondary schools, leaving initiative in the hands of local authorities.[2] The Commission recommended new Parliamentary grant regulations for secondary schools, with the Science and Art Department absorbed into one properly coordinated and organized central authority.[3] The 1899 Board of Education Act created the unified central body, and the 1902 Education Act formed the stable local education authorities which were to take the initiative.

Full reorganization within the Board of Education was delayed until 1903, by which time three branches came into being, for Elementary Education, for Secondary Education and for Technological and Higher Education in Science and Art.[4] The business of the former Science and Art Department at South Kensington had been carried out under the Board of Education in 1901–02, extending to 291,758 pupils in 2,061 institutions.[5] This involved work in both 'secondary' and 'higher' institutions. The bulk of the £300,000 Parliamentary grant was paid on attendance, or as a capitation grant in secondary schools, but £2,308 was still awarded on the results of the annual examinations, and £20,566 on the National Competition in Art.

In the 1904 Secondary School Regulations lay the foundation of a new era in secondary education. Robert Morant, then Permanent Secretary of the Board of Education, defined secondary education as a general, academic education, essentially liberal in its aims, and ensured the furtherance of this view by arranging for capitation grants to inspected and approved schools.[6] Technical education was a separate affair, but capitation grants were again given on attendance, with a few awards made on the results of higher examinations in Science and Art.[7] Supervision of the evening continuation schools had been transferred to the South Kensington Branch in 1901, even though a substantial amount of this was at an elementary level.[8] As the locally supported evening schools were intended for adults, they taught an immense variety of subjects, ranging from Gaelic to gas manufacture.[9] More and more of the applied subjects received central grants under the new central regime.

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[1] C.7862, p. 100. [2] Ibid. p. 257. [3] Ibid. pp. 85 and 313.

[4] *Report of the Board of Education for the Year 1902–03* (C.1763), pp. 5–6.

[5] C.7862, p. 52.

[6] *Board of Education Regulations for Secondary Schools, 1904–05* (Cd. 2128).

[7] *Board of Education Regulations for Evening Schools, Technical Institutes, and Schools of Art and Art Classes, 1904–05* (Cd. 2172), pp. 15–20.

[8] Minute of the Board of Education, 3 July 1901.

[9] *Report of the Board of Education for the Year 1903–04* (Cd. 2271), Appendix C, pp. 81–83

Morant succeeded in cleaving the old Science and Art Department in two. One half he replaced by a secondary school branch at the Board of Education: this was to support the growth of grammar schools. The other half was to support the growth of technical colleges, and classes for day and evening students. Headmasters of secondary schools had advocated this bifurcation to the Bryce Commission in 1895, stating that neither technical nor secondary education would be carried on efficiently if both were run together, and emphasizing their fears that a single central branch of the Board of Education for secondary and technical education would destroy the concept of the liberal education that they held so dear.[1] Elementary education was envisaged as something different both in stage and in nature from secondary education, and was organized separately as before.[2]

It should not be imagined that the Science and Art examinations became unnecessary when the central grant system was reorganized. The worst abuses of the examination system were removed with the new form of the grant, but the examinations served other purposes as well. Students, with their first- or second-class certificates, had evidence of ability and diligence. Teachers were given guidance and assistance by the syllabuses which were known to be generally acceptable, and this was particularly useful in evening school work where there were part-time lecturers. Local education authorities were able to use the examinations as an easy means of coordinating the functions of different technical schools in their areas, defining the range and standard of their work, and measuring their efficiency.[3] The operations of the Science and Art Department before 1899, unlike those of the Education Department, covered not only the whole of the British Isles but even extended for examination purposes to its colonies and dependencies.[4]

There were 1,488 examination centres for science in 1903, and 1,166 for art; 75,956 papers were worked at various levels for the former, and 89,992 for the latter.[5] A system of examinations of this magnitude could not be shaken off lightly. The new secondary school regulations after 1904 rendered these examinations less important to the schools, and there were decreases in numbers accordingly. Science examinations were held at 236 day and 955 evening centres in 1905, and 72,822 papers were marked.[6] The number of science papers was 68,806 by 1908.[7] A similar drop was registered in the number of art examinations. These were all known as the 'personal' examinations of students and were taken locally, but other central examinations were held. Examples of work were sent to South Kensington for assessment, and the National Competition in Art continued to attract thousands of entrants.[8] There was, nevertheless, a gradual withdrawal of central examining, and local initiative was encouraged to fill its place.

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[1] C.7862, Evidence, Vol. III, Qu. 5872–5.

[2] *Report of the Board of Education for the Year 1905–06* (Cd. 3270), p. 61.

[3] A. Abbott: op. cit. p. 77.

[4] C.7862, p. 27.

[5] *Report of the Board of Education for the Year 1903–04* (Cd. 2271), p. 65.

[6] *Report of the Board of Education for the Year 1905–06* (Cd. 3270), p. 79.

[7] *Report of the Board of Education for the Year 1908–09* (Cd. 5130), p. 173.

[8] Cd. 3270, pp. 79–80.

For a while, secondary schools were permitted to enter pupils for Board of Education Examinations in Science and Art, but heavy conditions were laid upon these.[1] Children in secondary schools were not allowed to take the examinations in their first two school years, for example. A special 'Group Certificate' was introduced to encourage unified courses; a Group Certificate could only be awarded for a pass in more than three subjects of an approved course at a certain level. The Board's system of examinations was completely recast after 1911.[2] The Board then announced its intention of abolishing its Stage 1 examinations, and of reforming the Stage 2, Stage 3, and Honours examinations into 'Lower' and 'Higher' grades respectively. It announced, too, its willingness to endorse certificates issued by local education authorities, for success in certain grouped courses of study. The single passes in individual subjects were felt to carry little weight in assessing a man's qualifications.[3]

The principle of endorsing the certificates of locally arranged examinations at the end of well-balanced courses of study was a new one. Even with central inspection, this move showed the growing confidence that could be placed in the local organizations. The Science and Art examinations, necessarily rigid at first, when the teachers were amateurs in need of guidance, had developed with the central grant system that depended on them. When the grant system was separated from the central examinations, the examination papers continued to be set for a while at regular intervals, as before. The 1902 Education Act threw responsibility on the local education authorities, and the examination changes after 1911 were a natural corrolary of this principle.

The idea of a 'Group Certificate' was not new. It had been current before 1904, but it was in that year that certain certificates granted by the City and Guilds of London Institute were first endorsed by the Board.[4] 'Technical institutions' were defined in this same year, and awarded a substantial central grant, on a capitation basis. These institutions included day classes, with courses of at least two years' duration, giving a higher technical training to those wishing to qualify in trades or in commerce, or in particular industrial processes.[5] It was very largely the growth in prestige of these locally founded institutions that enabled the examination systems to become less centralized.

In the first year of the new scheme, in May 1912, there were 2,558 candidates for Higher Examinations in Science, and 9,182 for Lower Examinations.[6] A large number of technical schools had already begun to make arrangements, singly or in groups, to provide internal examinations for their students, instead of entering them for Board of Education examinations. The Board was prepared to endorse these Grouped Course Certificates, providing the instruction and the examination were satisfactory. This was an attempt to decentralize while retaining a national standard. The art examinations were modified in 1913 to effect similar changes.[1] A Standing Committee of Advice for Education in Art had been busy reviewing the purpose and scope of such examinations for some years.[2]

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[1] *Board of Education Regulations for Secondary Schools, 1904–05* (Cd. 2128). Appendix B, p. 28.

[2] Board of Education Circular No. 776, June 1911.

[3] *Report of the Board of Education for the Year 1910–11* (Cd. 6116), p. 59.

[4] *Board of Education Regulations for Evening Schools, Technical Institutes, Schools of Art and Art Classes, 1904–05* (Cd. 2172), p. 35.

[5] Ibid. p. 20.

[6] *Report of the Board of Education for the Year 1911–12* (Cd. 6707), p. 101.

The Board gave notice that it would discontinue its Lower General Examination in Science and Technology after 1916.[3] The numbers entering for examinations both in science and art were greatly depleted by this time.[4] The range of Higher General Examination subjects was drastically cut after 1917.[5] Scarcely 100 students were now taking Board of Education examinations in art.[6] It was announced at the end of the First World War that all of the General Examinations were to be discontinued.[7] The art examinations were to be carried on in a modified form for many years, though the numbers were few compared with those at the turn of the century. As the central examinations system withered away it was replaced by a vast network of local and internal examinations. Many of these examinations were endorsed by the Board of Education, and by 1914 a great deal of work had been done in defining and formulating the relevant regulations. The results of this decentralization will be considered in a later chapter.

5. THE CITY AND GUILDS OF LONDON INSTITUTE

The examinations of the Science and Art Department were popular in many circles. Individual students welcomed a means of acquiring certificates to better themselves, and local authorities favoured classes that could benefit from the central grant. Dissentient voices grew louder, however, and the clamour eventually led to the abolition of the existing grant scheme. One source of dissatisfaction was the nature of 'payment by results'; another was the content of the examination syllabuses and in particular the theoretical nature of the education that was being encouraged.

One fundamental problem in technical education recurred throughout the nineteenth century: public aid to technical education was felt to be necessary to create a supply of trained workers, and to improve them in their trades, yet public opinion was against direct training. Vocational training for the textile worker would mean that his employer would benefit financially; education for the carpenter could mean that the plumber would demand it also. The Government's policy was to leave vocational training to the employers themselves, using, perhaps, some system of apprenticeship. The Society of Arts, it has been shown, adopted a similar policy at first. The employers, however, were less inclined to train their employees to a full understanding of an industrial process in a factory when, with hundreds of hands under one roof, a limited knowledge was frequently sufficient for the employers' purposes. Training, after all, implied expenditure. The traditional method of apprenticeship had decayed by 1869 when Silvanus Thompson lectured on this subject to the Society of Arts, and few employers did more than go through the motions of apprenticing novices.[1] Employees were left to make the best of the situation that they could with the aid of mechanics' institutes and, in the second half of the century, with the aid of the Science and Art Department, which stimulated a purely abstract approach to concrete problems.

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[1] Cd. 6707, p. 101.

[2] *Report of the Board of Education for the Year 1910–11* (Cd. 6116), p. 60.

[3] Board of Education Circular No. 921, 31 August 1915.

[4] *Report of the Board of Education for the Year 1915–16* (Cd. 8594), p. 43.

[5] Board of Education Circular No. 970, 30 October 1916.

[6] Cd. 8594, pp. 43–44.

[7] Board of Education Circular No. 1026, 5 February 1918.

A workshop type of approach to education was beyond the scope of the Science and Art Department in the nineteenth century. First, written papers lent themselves more easily to examination. Secondly, direct practical work might aid certain employers financially in competing with others, and was therefore felt to be outside the powers of the State. Hodgson Pratt, who was connected with the Artisan's Institute, could state that theoretical and practical instruction were like a man and wife, not to be separated, but this attitude was little respected by the Science and Art Department, or even by the technical education movement in the City before the creation of the City and Guilds of London Institute.[2]

The nature of technical education before about 1878 was strongly affected by the only machinery of any size, that of the Science and Art Department. An artisan, wishing to better himself, could work towards a certificate of the Department, but it was left to him to learn to apply any of the principles he learnt in the evenings to his trade, and it was this that could give him difficulty.

The Artisan's Institute, founded as a splinter group of the Trades Guild of Learning in 1874, had been intended to remedy the situation in a small way.[3] The guiding principle in this establishment was still that the education supplied should aim at supplementing the training of factory or workshop, rather than at superseding it. It was hoped, however, to give systematic instruction to apprentices and workmen not only in the principles of art and science which formed the basis of their various handicrafts, but also in the technical application of those principles to actual work. Grants to aid this institution were contributed by certain livery companies as well as by private benefactors.[4]

The Principal of the Artisan's Institute, the Rev. H. Solly, wrote a letter to the Science and Art Department in May 1875, requesting that qualified technical teachers in various crafts might be allowed to earn a central grant on the 'payment by results' system that was characteristic of the existing grants for science teaching. In a further letter, of February 1878, Solly stated that Science and Art payments diminished in value by not being followed up with practical application. The Science and Art Department's reply was that expenses should be borne by the workers who benefited from the classes.[5] The Department doubted whether the House of Commons would sanction the greater expense that would arise if trades were encouraged in this way, rightly assessing that it was state aid in the practice and details of certain trades that was being demanded.

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[1] Sylvanus Thompson: 'Apprenticeship: Scientific and Unscientific'. *Journal of the Society of Arts*, 1869, pp. 34 ff.

[2] *Journal of the Society of Arts*, 1869, p. 44.

[3] C. T. Millis: *Technical Education, its Development and Aims*, 1925, p. 40.

[4] Ibid. p. 42.

[5] Ibid. p. 44.

The Government's same policy was still visible in 1908, though in altered circumstances.[1] The Board of Education Regulations for Technical Education indicated that, where instruction was related definitely to the requirements of a particular trade or trades, and included practical instruction, the extent to which the course was concerned with principles and with their application to trade processes would be taken into account in assessing their rate of grant.[2] This was, of course, at a later date, when payment by results had ceased.

Faced with a Government policy of this sort, initiative lay with voluntary societies and independent bodies. The part played by the Society of Arts in introducing technological examinations in the 1870s has already been remarked upon, and the work of the Artisan's Institute has also been mentioned. The livery companies of the City of London were wealthy and independent, and these now came to the fore to bear the burden of industrial instruction almost alone for a decade, until the local authorities began to spend money on technical education. A resolution of a meeting of representatives of the livery companies in 1876 indicated that a move was afoot to aid education, and particularly the technical education of artisans and others in their trades.[3] A provisional committee, formed in 1877, asked six gentlemen of experience to report upon technical education. One of the six mentioned the existence of about forty organizations similar to the Artisan's Institute, but the general picture that was painted was scarcely satisfactory.[4] Individual city companies had been active in founding colleges and scholarships, and were to continue this good work over the years.[5] These benefactions were, however, isolated and uncoordinated. The City and Guilds of London Institute was formed in 1878, and incorporated in 1880 for the advancement of technical education, under its Director Philip Magnus.[6] A cumulative list of benefactions from livery companies up to the year 1908 showed that over £800,000 had been disbursed in the first thirty years of its existence.[7] This was a relatively small amount when compared with Government expenditure through the Science and Art Department, but it could be utilized together with the Science and Art grants to make courses in technology possible. Only a small part of this sum was spent directly upon the training of artisans, but it had an effect quite out of proportion to its value.

The Executive Committee of the Institute agreed to achieve its purposes in four distinct ways.[1] First, it was proposed to found a Central Institution of university rank, to train teachers and to give higher technical instruction. This College opened in 1884, at South Kensington, and gained a high reputation for engineering studies at a time when the subject was still missing from the syllabuses of London University.[2] The College was merged with the Royal College of Science and the Royal School of Mines in the Imperial College of Science and Technology in 1907, though retaining some measure of autonomy.[3]

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[1] City and Guilds of London Institute: Report of the Council to Members of the Institute for the year 1908, p. 68.

[2] *Regulations for Technical Schools, Schools of Art, and other Schools and Classes for Further Education* (Cd. 3555), 1907. Sections 31–32.

[3] City and Guilds of London Institute. Memorandum on the Origin, Development and Work of the Institute, 1949, p. 2.

[4] C. T. Millis: op. cit. p. 42.

[5] City and Guilds of London Institute. Memorandum on the Origin, Development and Work of the Institute, p. 4, 'List of Scholarships'.

[6] City and Guilds of London Institute. Report of the Council for 1890, Appendix F, p. 1.

[7] City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1908. Accounts. Table.

Secondly, technical instruction at a lower level was to be encouraged directly by arranging classes for artisans and others. These classes began in 1879 under the auspices of the City and Guilds Institute, though the Finsbury Technical College and the South London School of Technical Art were not completed for several years.[4] The former was the first technical institution of its kind in England, having day and evening classes in a variety of applied subjects; it became the prototype of the modern technical college.[5]

Thirdly, the City and Guilds Institute took over the technological examinations of the Society of Arts, which had already started in 1873. The Society of Arts had made arrangements for certain technological examinations to be held in conjunction with the Science and Art Department's examinations. Papers were thus set in cotton, paper, silk, and steel manufacture, and carriage building, it being necessary to qualify first in certain Science and Art subjects before a certificate was given.[6] The number of candidates rose from 6 in 1873 to 68 in 1877, which was disappointingly small. The number increased to 184 in the following year, mainly because of a donation of over £200 from the Clothworkers' Company which enabled the Society of Arts to give a capitation grant on every successful candidate in a way similar to that of the Science and Art Department.[7] This pointed the way to the City and Guilds Institute, which continued such payments by results for some years. It was this grant scheme that formed the fourth proposal of the Executive Committee in 1879.

An examination system linked with a capitation grant proved as effective in the technological sphere as it did in the world of the Science and Art Department. When the examinations were first taken over in 1879 there were 151 successful candidates, yet by 1908 there had been a steady rise to 13,058.[8] The sums paid were not large, being under £1,600 in 1884, as compared with £490 spent on prizes; they were nevertheless sufficient.[9]

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[1] C. T. Millis: op. cit. p. 55.

[2] *A Short Notice of the City and Guilds of London Institute*, 25 June 1884.

[3] City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1908, pp. ix-xxiii.

[4] Ibid. pp. xxix and xxxiii.

[5] City and Guilds of London Institute. Memorandum on the Origin, Development and Work of the Institute, p. 3.

[6] C. T. Millis: op. cit. p. 59.

[7] *Journal of the Society of Arts*, 1878, p. 713.

[8] City and Guilds of London. Report of the Council to the Members of the Institute for the Year 1908, p. 81, Table 1.

[9] City and Guilds of London Institute. Report and Pass List, 1884, p. 11.

The City and Guilds grants ceased as the efforts of local authorities under the Technical Instruction Acts began to bear fruit.[1] The examinations of the Institute continued under the guidance of its Department of Technology, running parallel to those of the Science and Art Department, and later to those of the Board of Education. Most of the classes with which the Institute was concerned already received grants from the Board of Education, or from the corresponding bodies in Scotland and Ireland.[2] The teaching provided for the classes registered by the Institute, was supplementary to the more general instruction, mainly in science, which was under the control of the central authority. The Institute could state, in 1908, that its aims in this work were to help the central authorities in assisting and guiding schools to provide technological instruction, and to effect a proper coordination between workshop practice, laboratory teaching and class teaching.[3] To further these aims it arranged schemes of instruction in the theory and practice of a variety of industries, to be adapted to local custom. Complete schemes were planned for the evening class pupils who formed the vast majority of its students. Classes were registered and inspected, there being 48,223 students at 402 centres in 1907. Examinations played an important part in such arrangements.

One reason for the continuance of examinations was that they enabled local authorities or school managers to form an idea of a school's efficiency. Another was that the students benefited, for it was appreciated that the certificates had a commercial value.[4] The examinations were said to be serviceable to the Board of Education in assisting its officers to gauge the value of the teaching, and in assessing the rate of their grants in aid. The Institute's papers frequently took the place of school examinations, and were also used for the award of prizes. Thus, the Drapers' Company gave five £60 scholarships and twenty £10 exhibitions on the results of the Institute's examinations in textiles, and there were altogether prizes available to the value of £534 10s. in 1908.[5] The Post Office gave pay increments to those of its employees holding the Institute's First Class Certificate in the Ordinary Grade of Telegraphy or Telephony.[6] A little extra competition and discrimination was generated by the device of awarding both Ordinary and Honours passes in most subjects.[7]

Examinations, even the most carefully planned, tend to determine the curriculum in the course of time, and this was doubtless true of the City and Guilds organization, with its history of payment by results and its lack of any real contact with the schools.[8] The tendency was ultimately countered by establishing advisory committees in each subject. Thus, there were committees for plumbing, the leather trades, and gas manufacture in 1908. Five of these existed in 1918 but the device only became popular more recently; there were over 80 in 1949.[1] Some contact was maintained between the Institute and its classes by inspection after 1891, it being the duty of the Institute's specialists to report upon the particular facilities for trade instruction at each centre.[2]

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[1] City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1890, Appendix F, pp. 4–7.

[2] City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1908, p. 67.

[3] Ibid. pp. 68–69.

[4] Ibid. p. 71.

[5] Ibid. pp. 79–80.

[6] Ibid. p. 71.

[7] Ibid. p. 119.

[8] A. Abbott: 'National Certificates for Students in Technical Schools.' International Institute Examinations Enquiry. *Essays on Examinations*, 1936, p. 121.

One of the less satisfactory aspects of the City and Guilds examinations was that much of the work was duplicated by the Science and Art Department as its scope gradually widened. This was a particular handicap to the City and Guilds organization after 1891, when the local authorities began to take the initiative. The Department's building construction classes clashed with the carpentry, brickwork and plumbing courses of the Institute in this way.[3]

The Technology Committee directed all the examination work of the Institute, and by 1949 included representatives of industry, the major professional institutions and the Ministry of Education, as well as of the City Livery Companies.[4] The work of the Institute had grown enormously by this time, to cover 63,716 candidates in 170 subjects, at 900 centres. A complicated network of examiners, moderating and advisory committees was now linked with the central, local and regional bodies. The Institute continued to serve a useful purpose, and numerically it appeared more consequential than ever, but its most important job had perhaps been accomplished. By 1949 it acted as a focus or a meeting point for the trades and professions who worked closely with the public authorities, but in its earliest days it had served to stimulate and to supplement state action at a time when direct aid to technological training was against Government policy. In 1911 the Institute was working closely with the Board of Education towards the Grouped Course Certificates already described.[5] After this stage, the Board's schemes for the endorsement of internal examinations by technical institutes, together with the formation of local examining bodies on a regional scale, opened up a new phase of examining in technical education.

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[1] City and Guilds of London Institute. Memorandum on the Origin, Development and Work of the Institute, p. 5.

[2] City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1908, p. 72.

[3] P. Magnus: 'Technical Education: Its Progress and Prospects'. *Journal of the Society of Arts*, 1893, p. 428.

[4] City and Guilds of London Institute. Memorandum on the Origin, Development and Work of the Institute, pp. 2–6.

[5] City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1911, p. xxiii.

CHAPTER FIVE

Secondary School Entrance Examinations

1. ENTRANCE TO AN ENDOWED SCHOOL BEFORE 1890

One of the kinder features of medieval life was the widespread custom of endowing charities. Sums of money were left by men of goodwill to provide almshouses, relief for widows, or upkeep for bridges. Money was also given for the education of poor children and youths, both at grammar schools and at the universities. Such traditions of endowing scholarships lingered on longer in England than in other European countries, where radical changes had led earlier to more unified educational arrangements in which the State played a dominant part. Scholarships continued to be offered in England to suitable pupils in schools of a secondary nature in the twentieth century, as they were also made available to certain Oxford and Cambridge entrants.[1]

Medieval endowments were restricted by a variety of clauses. For example, founder's kin originally received right of admission to Winchester, and preference was given to the natives of certain localities in selecting the free scholars.[2] It may have been clear from the founder's order that only worthy boys were to be given entry, but there is little evidence of that competitiveness that was later to become a feature of such scholarships. Free, or subsidized education was available to many poor children in grammar schools throughout the country, as Arthur Leach indicated.[3] Although it was customary for parents to pay fees, it is clear that many school places were open to the poor. A useful chronological list of existing endowed grammar schools, with the purposes of their foundations, was published by the Schools Inquiry Commission in 1868.[4]

Some form of competition for the scholarships was introduced at Westminster School, which was founded anew by Queen Elizabeth in 1560.[5] Many medieval traditions were perpetuated, for the regulations were copied in detail from the Winchester prototypes.[6] Dean Liddell, a former headmaster, stated in 1864 that the entrance arrangements for places originally resembled 'academical disputations' in many ways, though the operation of the oral examinations now appears to be more akin to that of the 'ladder' frequently used in sports clubs to give an order of merit and stimulate a little activity. Under the 'ladder' system, one person is allowed to challenge the person immediately above him, and may take his place if he can beat him. It was Greek that provided the sport at Westminster, and it is interesting to note that the competition was known as the 'challenge', as it is in a squash or a tennis club to this day.[1]

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[1] *The Public and Preparatory Schools Year Book*, 1962, pp. 585–99.

[2] J. D'E. Firth: *Winchester College*, 1949, pp. 31–34.

[3] A. F. Leach: 'The True Meaning of "Free School".' *The Journal of Education*, July 1908, pp. 495–97.

[4] Taunton Report, 1868, Vol. 1, Appendix IV.

[5] J. Sargeaunt: *The Annals of Westminster School*, 1898, pp. 1–3.

[6] A. F. Leach: *Winchester College*, 1899, pp. 301–3.

When the Public School Commissioners reported in 1864 they found that Westminster alone of all the public schools had experienced any form of properly organized competition for its scholarships up to the middle of the century.[2] Eton introduced open competition in about 1844, and Winchester in 1854.[3] The establishments considered by the Public School Commissioners were the 'great' schools, which catered for the sons of the wealthiest section of the community, together with certain scholarship holders. A similar position was revealed in the Schools Inquiry Commission Report of 1868, when those endowed schools not previously examined were brought under the microscope.

Only a negligible amount of public aid was given to secondary education at the time of this last Report, and it was the endowments of the grammar schools and the public schools which, almost alone, provided poor parents with the chance of obtaining this type of education for their sons. It was clear from the Commissioners' Report that the endowed schools as a class were ineffectively using their resources. They had gradually outgrown their original functions, and the situation was made worse by the rigid social distinctions of the mid-nineteenth century together with the widespread habit of demanding fees from pupils. The numerous examples of abuse of endowments produced by the Assistant Commissioners of 1868 combined to provide a *reductio ad absurdum* proof in favour of reform. Lord Eldon's decision in the Leeds Grammar School case of 1805 had given a solution which was open to severe criticism. He laid it down that, as the original endowment of free places had been for the teaching of Latin and Greek alone, so fees might be charged to pupils for all other subjects.[4] Fees in 'free' grammar schools were thus legalized and the possibility of introducing modern subjects in a commercial centre was aided; but the way was also laid open for the possible suppression of free places for poor scholars. Practice differed widely over the country in 1868.[5]

In some cases endowments were being applied to give free education to all boys in the neighbourhood. The Commissioners were of the opinion that such scholars were generally irregular in attendance, and that parents were unwilling to provide books and other such aids, and so this method was equated with low standards.[6] In some cases certain free scholars were selected by trustees, whether by open competition or by other means, but this frequently resulted in a rift within the school, between the scholars and the rest. Proper entrance examinations for the free places too often existed in theory rather than in practice, and the Commissioners felt that these were absolutely necessary if the schools were to operate effectively.[7] Evidence concerning Monmouth School and the Mercers' School in London revealed that no attempt was made to graduate the entrance examinations by age.[8] The disruptive effect of having boys of different ages in the same form was one unhappy consequence. Mention was made of the parents' neglect of a previous education for a future scholar when no entrance standard was stipulated. Very few of the lowest class at Brigg Grammar School could read as required by the rules, while the entrance examination at Loughborough was kept entirely in the hands of the trustees, and beyond the control of the schoolmaster.[1] The testing of free scholars was frequently very lax, and it may be imagined that the examination of feepayers was more so.

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[1] *Report of Her Majesty's Commissioners appointed to Inquire into the Revenue and Management of Certain Colleges and Schools*, 1864, Vol. 1, pp. 159–60 (Clarendon Report).

[2] Clarendon Report, p. 160.

[3] Ibid. p. 67.

[4] Taunton Report, Vol. 1, p. 452.

[5] Ibid. pp. 122–25.

[6] Ibid. p. 149.

[7] Ibid. p. 154.

[8] Ibid. p. 156.

Nomination by the governors provided a common means of determining who was to have free schooling. In some cases this was done collectively, and upon an established principle. Usually it was decided to select the poorest candidates, or the ablest.[2] This was not always very satisfactory as there was frequently a lack of detailed personal knowledge about a candidate, and it was not easy to select the boy who would benefit most by the schooling. Individual nomination, as at Christ's Hospital, was likely to be capricious.[3] A child's name came to be put forward not because he was the most deserving but for personal or even political reasons.

Free scholarships were already being offered on competitive grounds in certain schools. Doncaster Grammar School was founded in 1618 with a small endowment, and struggled along until 1862 with the assistance of Doncaster Corporation, an early example of public aid. In that year a Court of Chancery scheme cut across the traditional methods. Doncaster Corporation agreed to subsidize ten free places at the school annually, and the 'Corporation Scholars' were to be selected by competitive examination from children in the local elementary schools.[4] It was such reliance as this upon competitive examination that was advocated by the Assistant Commissioners of the Schools Inquiry Commission, and these were men who had had the opportunity of comparing methods in the field.[5]

The Commissioners displayed the advantages of full open competition for secondary school selection purposes. Indiscriminate free instruction was termed an unwise use of endowments, for many could afford to pay the fees. The Commissioners felt that free instruction should be the reward of merit, and any observation that the children of the wealthier classes might be in a better position to succeed in open competition was brushed aside by the assumption that entrance examinations would be held in common subjects such as arithmetic, which were as easy to teach to the poor as to the rich. It is odd to note that the Commissioners felt that twelve was too tender an age for a competitive examination.[6] It was suggested that younger children should be observed carefully at selected schools under the proposed 'provincial authorities'. The purpose of the entrance examinations advocated was to raise standards, and to make it again possible for the able child of poor parents to realize his full potential. Such competitive aims have already been shown to be typical of the period.

When the schemes prepared for endowed schools by the Commissioners after the 1869 Endowed Schools Act came to be published, they revealed a certain similarity. The admission rules at Chigwell School will thus serve to illustrate others. The headmaster was required to keep a register of applications for admission, and to examine entrants.[1] The pupils were to enter in order of application if there was room, with preference given to the residents of specified local parishes. If the demand for places exceeded the supply, then the Governors might determine priority of entrance by competitive examination. Examinations were to be graduated by age, and a certain minimum standard was laid down.[2] Governors were allowed to give exhibitions on the results of the entrance examinations, relieving the parents wholly or partly of the tuition fees.[3] The number of such 'foundation scholars' was limited to ten per cent of the whole, at most. Here then was the means of insisting upon a *qualifying level to be reached* before entry, with the prospect of competition acting in such a way as to lead to rising standards. This machinery was mass-produced over the country, and even if it was exceedingly flexible or indefinite as regards age or entry standard, it was the beginning of some sort of uniformity, and it tended to set a level of attainment for new boys.

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[1] Taunton Report, Vol. 1, p. 155.

[2] Ibid. p. 156.

[3] Ibid. pp. 157–58.

[4] Ibid. p. 158.

[5] Ibid. p. 158.

[6] Ibid. p. 594.

2. SECONDARY SCHOOL SCHOLARSHIPS IN THE 1890S

Local authorities began to busy themselves with secondary education after the Technical Instruction Acts of 1889 and 1891 and the Local Taxation (Customs and Excise) Act of 1890 permitted the newly formed councils to assist technical education. Despite a clearly drawn distinction between the ideas of liberal and technical education, the Technical Education Acts were fairly liberally applied. Indeed, a great number of grammar and other secondary schools came to benefit from the county or county borough grants that might have been expected to have gone elsewhere. Technical instruction was defined in the 1889 Act; the teaching of modern languages was admitted as a technical subject, and the Department of Science and Art was left to sanction other subjects.[4] When the Royal Commission on Secondary Education reported in 1895, it found that twenty-two out of forty-eight counties were making direct grants to grammar or secondary schools, and that six more were giving small amounts for equipment.[5] Council grants were thus given to encourage secondary education generally, and were not utilized solely for technical subjects. They were made both annually, for maintenance, and as capital for building or repairs. In return, it was necessary for the county council or its technical instruction committee to be represented on the managing body of the aided school.[6]

County council participation did not end at this. Thirty-two of the counties and eight of the county boroughs spent money on secondary school scholarships: a different matter this from giving money to the schools.[7] A total of £30,071 was being spent on 2,207 secondary school children by 1894. By this time £54,596 was spent on 6,807 scholars altogether, whether in secondary schools, evening schools or classes, or in places of higher education. The possibilities of the situation had stimulated the county councils to found seventeen new secondary schools in that year alone. Direct local aid to secondary schools, at £17,169, was exceeded by the total amount spent on scholarships to them, though the ratio of the two varied markedly from county to county. The secondary school scholarships were generally of between ten and fifteen pounds in value, and were intended to defray fees rather than relieve parents of payment entirely, and they were not given to the wealthy.

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[1] Copy of a Scheme for the Management of Archbishop Harsnett's School, Chigwell, 17 May 1871. Sections 47–48. *Parliamentary Papers*, LVI.

[2] Ibid. Section 49.

[3] Ibid. Section 56.

[4] Technical Instruction Act 1889, Section 8.

[5] Bryce Report, Vol. 1, p. 33.

[6] Technical Instruction Act 1889, Section 1.e.

[7] Bryce Report, Vol. 1, pp. 32–34 and Appendix, Table 5, pp. 373–76.

The local authorities, with their new responsibilities in secondary or technical education, now found themselves with problems of selection, sometimes on a relatively large scale. Selection was a matter which had already faced the governors of endowed schools, particularly after the schemes of the Charity Commissioners or the Endowed Schools Commissioners had made it formal and necessary. Each endowed school had gone its own way about testing potential exhibitioners, and this arrangement was unsatisfactory both because there was no common course to be followed by young boys, to the bewilderment of parents, and because the examinations were related to the particular secondary school curriculum rather than to that of the contributory elementary schools.[1] Such a method, or lack of it, could only suffice in a small community where common practice was well known. When rate aid was given, it was necessary to establish a set of principles of selection over the whole county.

A system of examinations sprang up in connection with the Headmasters' Association. The Honorary Secretary of that body explained the aims behind the scheme to the Secondary Education Commission in 1894.[2] Briefly, headmasters or county councils awarding scholarships were provided with an expert and impartial means of selecting boys by a public examination. A certain measure of uniformity was introduced. The examination was intended to select exceptionally able boys from public elementary schools, and was therefore based on the elementary education code; it included alternative questions and papers to counter excessive uniformity. Separate papers were issued for rural children, and Jewish candidates for example, were tested separately for religious instruction. Allowance was made for age, which was normally intended to be twelve. A code of conduct was proposed for the scholarships themselves, so that the tenure of the awards should depend on good behaviour, and so that maintenance grants should be made available wherever they were necessary. The actual awarding of the scholarships was left entirely in the hands of the individual sets of governors, or of the county council; the voluntarily organized examining body had no authority here.

There were 482 candidates at 14 centres when the first examination was held in the spring of 1893. There were two examinations each year, and nearly 4,000 candidates were participating by 1894.[3] About 500 awards were made in this last year upon the results. Ten counties or county boroughs utilized the examinations on the same basis as the endowed schools, selecting their winners from an order of merit prepared by the examiner, a Mr E. E. Pinches. Pinches also acted as scholarship examiner to the London School Board on a similar basis, even setting the same papers, for there was close liaison at this point between the Technical Education Board of the London County Council and the Headmasters' Association. The local authorities were free to select scholars as they wished, some taking the first dozen on the list, others allotting a certain number to each district or to each school. London County Council made inquiries into the parents' circumstances before giving a scholarship. The Headmasters' Association scheme died out as county councils began to organize their own examinations in a much larger way.

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[1] Bryce Report, Vol. IV. R. P. Scott, Evidence, Qu. 13,990.

[2] Ibid. Qu. 13,986 ff.

[3] Ibid. Qu. 14,003–14,041.

The Royal Commission Report of 1895 was the first opportunity for opinion to be gathered together on a wide scale concerning the future of state-aided secondary education. The review of the local authority scholarships revealed a rich variety of practice. Middlesex County Council awarded only 15 scholarships, while neighbouring London made 1,000 available; each authority had its own conditions and methods of entry.[1] If practice varied, opinion differed widely at the end of the nineteenth century on the future of secondary education. There were, however, certain broad principles about which the majority of witnesses agreed. It was generally felt that secondary education should be self-supporting, with parents paying fees. There was also widespread support for the establishment of a reasonable number of scholarships for poor children.

The Bishop of London stated these very principles, adding that it might be right for rate money to be spent on buildings as well as scholarships in secondary schools of a public nature.[2] Pinches, the examiner, who was a member of the College of Preceptors, felt that secondary education should be made self-supporting by private enterprise, though linked to the elementary schools by a system of endowments and scholarships.[3] There was some talk of secondary education being provided free but there was a stronger feeling that parents should be made responsible for their childrens' education, and should pay for it where possible, leaving any State aid to be devoted to the education of the needy.[4] Opposition to free education came, of course, largely from private schools who would see this as unfair competition.[5]

It was clear from the evidence that the demand for the 'minor scholarships' exceeded the supply.[6] A former inspector of training colleges was of the opinion that about five per cent of the places should be kept free for the able children of poor parents.[7] A member of the Huddersfield School Board put the fraction at one in three, though he probably had in mind the 'higher grade' form of school then common in the North.[8] It was expected that scholarships should be available for the needy, and attendance at an elementary school was assumed to be a test of relative poverty. But the growing numbers of white-collared workers in the larger cities were now beginning to send their children to elementary schools, and were thus in a position both to win scholarships and to pay fees. Here lurked the intrusion of the means test.[1] School standards posed another problem, for they varied widely between rural and urban districts, raising the problem of the justice of selection.[2] The monetary value of the scholarships was a matter of dispute, and so was the proportion to be awarded to girls in an era before it was generally felt necessary to educate women as fully as men.[3] Other administrative problems occurred: the possibility came under review of linking scholarships to elementary schools rather than to secondary schools. The difficulties of combining the various forms of independent schools into an ordered whole were apparent everywhere. Many recent problems in secondary school selection were already being discussed in 1895.

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[1] Bryce Report, Vol. I. Appendix, Table 6.

[2] Ibid. Vol. II. Evidence, The Bishop of London, Qu. 3835–36, Qu. 4732.

[3] Ibid. Qu. 5596–5609.

[4] Ibid. Sir G. Young, Qu. 336.

[5] Ibid. E. E. Pinches, Qu. 5548.

[6] Ibid. Vol. I, p. 168.

[7] Ibid. Vol. III. Evidence, J. G. Fitch, Qu. 9140–41.

[8] Ibid. Dr R. Bruce, Qu. 6702.

The age of transfer from elementary to secondary schools had hitherto lain anywhere between 11 and 14, the optimum age being a matter for debate. Some said that it was impossible to test a boy for an important award until he was 13 or 14, while others held that the earlier age was preferable because it permitted Latin, French and mathematics to be started sooner, enabling scholarship boys to be on equal terms with the others.[4] Competitive examinations were sometimes stated to be unsuitable for those below the age of 12, while Miss Beale, of Cheltenham College, had put the lowest limit at 16.[5] The Clerk to the Liverpool School Board questioned the very idea of competitive examinations in their existing form. He wished primary school headmasters to have a greater say in the selection of scholars, while admitting the dangers of external influence from parents.[6] He spoke, too, of choosing scholars not so much by their attainment as by their capacities for attainment. He mentioned that Professor George Forbes had carried out for the Liverpool School Board some experiments designed to select boys by observing their reactions when learning a completely new subject; this was some indication of a scientific attitude.

Majority opinion remained, however, in favour of competitive examinations for scholarships, this being considered the only fair way in the long run, when all other methods then available were likely to degenerate into personal favouritism.[7] The purpose behind the local authority scholarships was to remain similar to that of the reformed endowed school scholarships. These were regarded by reformers as indispensable steps in the educational ladder by means of which boys of rare capacity might pass from elementary schools to universities.[8] The ideals did not differ much from those behind the scholarships to medieval grammar schools. Only the methods had changed, money being provided by the rates and not by charitable bequests, and selection procedures being codified with nineteenth-century thoroughness.

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[1] Bryce Report, Vol. I, p. 168. [2] Ibid. p. 169. [3] Ibid. p. 186.

[4] Ibid. Vol. II. Evidence, D. Richmond, Qu. 703–6, Rev. T. W. Sharpe, Qu. 1379.

[5] Ibid. Rev. T. W. Sharpe, Qu. 1369, Miss Beale, Qu. 7934.

[6] Ibid. Vol. IV. E. M. Hance, Qu. 13,567–74.

[7] Ibid. Vol. I, p. 171.

[8] Ibid.

The Royal Commission Report of 1895 could do scarcely more than sum up the evidence; little guidance at a detailed level could be given because of the wide variety of practice. The lack of uniformity was deplored by the Commissioners, and a blessing was given to the methods of the Headmasters' Association.[1] The possible ways of allotting scholarships were carefully enumerated, but no choice was made between them.[2] Rather, the onus was laid on each local authority to make decisions suitable to its own neighbourhood. Current opinion was in favour of augmenting the power of the county councils, who were recommended as local authorities for most forms of education.[3] The Report suggested that local authorities should be enabled to initiate schemes for educational endowments in a similar way to the Endowed Schools Commissioners.[4] The public character of the endowed schools was emphasized, and it was suggested that they should receive scholarship holders from the county councils, submitting to some sort of supervision in return.[5]

The numbers involved in the early scholarship schemes under the Technical Instruction Acts were not large. It has been estimated that there were less than 2,500 scholarships in 1894, and less than 5,500 by 1900.[6] The widespread multiplication of scholarship places was only to come with help from the Board of Education after 1907.

3. THE 1902 EDUCATION ACT AND ITS CONSEQUENCES

The 1902 Education Act brought some administrative order into the field of secondary education. Elementary schools in the nineteenth century were organized under a central Education Office by specially elected local school boards, or by voluntary effort; where they were aided at all, the secondary schools received help from the county councils or the Science and Art Department. The county councils were separate from the school boards, and the Science and Art Department worked distinctly from the Education Office. There was little in the way of comprehensive organization, and scholarships raising a child from one form of education to another were numerous only in those heavily populated centres where local interests were finely focused. The 1902 Education Act, however, placed education at a local level largely in the hands of the county councils and county borough councils, giving them certain powers over elementary and secondary education in both maintained and voluntary schools. Some of the larger non-county boroughs were given limited powers for elementary education only under Part III of the Act, but generally the way was cleared administratively for the easier transition of pupils from one form of education to the other. The selection of elementary school children for secondary school places was soon to become a major educational problem, and the task of resolving it was left mainly to the new local education authorities under central stimulation.

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[1] Bryce Report, Vol. 1, p. 172. [2] Ibid. p. 300. [3] Ibid. p. 267. [4] Ibid. p. 275.

[5] Ibid. pp. 277–78, and p. 297.

[6] *Report of the Board of Education for 1911–12* (Cd. 6707), pp. 8–9.

The Government had traditionally favoured a technical as opposed to a liberal form of education for its aided secondary schools. It has been shown that the part played by the Science and Art Department in aiding a scientific form of education led to the establishment of 'organized science schools', or aided science classes in existing schools. This tendency was encouraged well into the first decade of the new century by grant regulations which gave a better grant to these than to secondary schools of a more liberal type.[1] Local authorities took advantage of this in the 1890s, the existence of many schools and classes being based on the Science and Art grants. School boards ran 'higher grade schools' which were really secondary schools, and the education they provided was therefore beyond the scope of the elementary education authorities, as the Cockerton Judgements revealed.[2]

The county councils, largely under the influence of the newly established Board of Education, began to favour a liberal form of education after about 1904.[3] County secondary schools were constructed, and these generally took the form of academic grammar schools rather than scientific or technical schools. The Board of Education was in a strong position to influence the nature of such new schools by the terms of its Regulations for Secondary Schools, upon which the central grant for these institutions depended. Robert Morant, who was Permanent Secretary when these Regulations were drafted, was brought up in the classical tradition, and so were many of the influential civil servants around him. The Regulations were the result of discussions in educational circles, and reflected the philosophy of the times, for it was generally felt that it was right to educate the ablest children as far as possible. This was during a period when liberal thought was gaining influence. The best attainable education was widely considered to be that of the endowed grammar schools, based as it was upon the classics, or on mathematics, or at least on a sound general education. There was little opposition and much support for the Board's policy.[4]

The number of scholarships continued to increase slowly. London County Council, ahead of its time, provided 600 in 1893, and as many as 2,000 in 1904, but a slower growth was noticeable elsewhere.[5] It should be understood that the old methods of the 1890s continued for a while until the Board of Education began to take a new lead in stimulating the provision of scholarships.

One of the first moves made by the Board of Education after its constitution in 1899 was to establish a new method of recruiting and educating pupil-teachers for elementary schools. Local authorities were gently manoeuvred into providing secondary school places for this purpose by the 1903 Regulations.[6] Pupils were expected to receive instruction in a secondary school up to the age of sixteen, when pupil-teaching began. Instruction for half the school time, in an approved pupil-teacher centre, was required after this. Where secondary schools were not available, the under-sixteens might be taught in a higher elementary school, or in a preparatory class at a pupil-teacher centre, but there was every indication in the Regulations that it was a full secondary education that was being demanded for future teachers.

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[1] *Board of Education Regulations for Secondary Schools, 1903* (Cd. 1968).

[2] E. Eaglesham: *From School Board to Local Authority*, 1956, pp. 122 ff.

[3] *Board of Education Regulations for Secondary Schools, 1904–05* (Cd. 2128). Prefatory Memorandum, pp. 5–16.

[4] O. L. Banks: 'Morant and the Secondary School Regulations of 1904.' *British Journal of Educational Studies, 1954–55*, pp. 33 ff.

[5] P. B. Ballard: 'The Special Place Examination.' *Essays on Examinations*, 1936. p. 110.

[6] *Board of Education Regulations for the Instruction and Training of Pupil Teachers in 1903* (Cd. 1666), pp. 14 ff.

The situation in 1906, shortly before more important changes were made in the grant regulations, showed how effective this last central move had been in increasing the number of free secondary school places. 11,430 scholarships were then being held in secondary schools by intending teachers, as against 12,120 other scholarships.[1] The principle of binding children to become teachers at an early age might nowadays seem indefensible, but the effect in numerical terms was considerable. An important result, too, was the introduction of large numbers of secondary school scholarships for girls, as women teachers were in as great a demand as men in elementary schools.

The connection between secondary schools and the training of elementary school teachers was strengthened after 1907–08 by a 'bursary' scheme which allowed central grants to be made for keeping secondary school children at school for an extra period up to the age of seventeen or eighteen, if they promised to become teachers.[2] Such forms of central aid for fledgling teachers were not so popular by 1912, when the less limiting 'free place scholarships' were increasing numerically.[3] Morant could steer through a much more effective scholarship system when the Liberal Government was in power in 1907, relying heavily on scholarships to develop the secondary school network and to expand opportunity.

The 1907 Regulations for Secondary Schools required that, for a secondary school to receive a grant and to be recognized by the Board, it should keep one-quarter of its places free for scholars from the public elementary schools.[4] The applicants were to pass an entrance test of attainment and proficiency approved by the Board, having regard to their age, the subjects, and the standard necessary for the admission of fee-paying pupils. An annual grant of £2 was given to the secondary schools for each scholar between the ages of 10 and 12 years who had been at a public elementary school; this acted as an incentive to take fee-paying ex-elementary school pupils as well as scholars.[5] A grant of £5 was also made for each boy or girl in the school between the ages of 12 and 18.

Government statistics revealed how successful this scheme was in increasing the opportunities available to elementary school children. A total of 33,571 children earned free places at the beginning of 1908, being almost equally divided between council schools and endowed schools, with a small minority attending Roman

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[1] *Report of the Board of Education for 1911–12* (Cd. 6707), p. 11.

[2] *Board of Education Regulations for the Preliminary Education of Elementary School Teachers, 1907* (Cd. 3444).

[3] *Board of Education Report for 1912–13* (Cmd. 7341), p. 149.

[4] *Board of Education Regulations for Secondary Schools, 1907–08* (Cd. 3592), p. 5.

[5] Ibid. p. 11.

Catholic or Girls' Public Day School Trust establishments.[1] 36 per cent of the places in council schools, and 24 per cent of those in endowed schools receiving grants, were then free. When, two years later, there were nearly 45,000 having free education, a further 30,000 fee payers brought the total number of ex-elementary school pupils up to about 60 per cent of the secondary school population.[2] This was at a time when the suburbs of the great towns were beginning to expand, swollen by the new white-collar workers, persons who were content to patronize the elementary schools, but who were ambitious enough to demand a secondary education for their children, paying fees if necessary.

The history of secondary school scholarships reveals much of the position maintained by the State in education. For a long time scholarships provided the one means of educational improvement employed by general consent; they raised no controversies, even in the struggle between Church and State over the control of education.[3] The promising were promoted; gaps were bridged; the individuality of schools and colleges remained undisturbed. Scholarships could even be described as safety valves, enabling a stream of talented boys and girls to enter the ranks of the directing classes.[4]

The improvements of the Endowed Schools Commissioners and of the Charity Commissioners represented the best that the State could do until the 1890s. The consequent application of rate money was an extension of this scholarship idea. Scholarships fitted in with the traditions of the endowed schools, and provided a means of giving rate aid without demanding control by the public authorities. Finally, the central government itself began to make the running, especially after 1907, by offering grants for suitable forms of education. Scholarships were then raised from the position of being relatively isolated expedients for the education of poor but intelligent children, to the vital feature of a principle of selection.

4. THE FREE PLACE SCHEME

The 'free place scheme' initiated in 1907 never kept pace with the demand for secondary education, but it was nonetheless spectacularly successful in developing the secondary education system. Many new schools were brought into being, and the number of pupils increased by leaps and bounds. Whereas there were 272 recognized secondary schools in 1901–02, with 31,716 pupils, the number had risen to 885, with 151,045 pupils by 1911–12.[5] This is not to suggest that the majority of the 885 schools had been built in that period, but rather that many existing establishments had been brought up to an agreed level of efficiency under the new grant regulations. The number of scholarships had risen from about 5,500 in 1900 to

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[1] *Board of Education Statistics of Public Education in England and Wales, 1907–08* (Cd. 4885), p. 137, Table 47.

[2] *Board of Education Statistics of Public Education in England and Wales, 1909–10* (Cd. 5843), p. 116, Table 45.

[3] M. Sadler: 'The Scholarship System in England to 1890, and some of its developments.' *Essays on Examinations*, 1936, p. 76.

[4] Ibid. p. 3.

[5] *Report of the Board of Education for 1911–12* (Cd. 6707), p. 4.

38,009 in 1911–12. If endowed school scholarships are to be added, the total of free places was 49,120 at this last date. One in twenty-two of elementary school leavers now went on to a secondary school in England, while the system of intermediate schools peculiar to Wales was more generous than this in the allocation of places. Even this ratio, however, was soon to become insignificant.

The number of schools on the grant list was 931 by 1916–17, and most of these received full grant and kept a quarter of their places free. Out of a total of 198,759 pupils, 61,776 earned free places.[1] Local education authorities continued to open new schools throughout the 1920s, the total reaching 1,177 in 1926.[2] There was a strong tendency for the schools to be brought into line by the grant system, receiving a uniform rate of aid and offering a minimum of twenty-five per cent of free places, conditions which were not universal in 1908. 40.9 per cent of the pupils paid no fees in 1926–27. Sheffield had given free secondary education to all after 1918, Bradford had given the same in its maintained schools in 1919, and there were now five similar areas. Forty other areas gave more than 40 per cent of free places instead of the minimum. The scholarship boys were showing their worth, too, for 48.1 per cent of the free pupils obtained a School Certificate in 1926–27, compared with 19.8 per cent of feepayers. The number of school places had more than doubled in twenty years, and the percentage of free places had increased eightfold. Morant had stated in 1907 that grant-aided secondary schools were to be made fully accessible to children of all classes, and not merely reserved for the wealthy and the exceptionally able; considerable progress had been made in achieving this.[3]

The Board of Education Report of 1911–12 surveyed the operation of the grant scheme since 1907, and found that same variety of selection methods noted in 1895.[4] Each local authority went its own way, some giving free tuition alone, others adding money for books and travel, others paying for maintenance as well. Leeds and London set a maximum income limit for parents claiming maintenance allowances; Lancashire, Leeds and the West Riding postponed the allowance until the third year at school. Certain rural counties, and even some urban authorities, gave boarding allowances to help towards the cost. It was the custom at Brighton to allot a number of scholarships to each elementary school to counter the advantage otherwise held by the schools in the 'better' districts. Newcastle-upon-Tyne allowed the elementary school head teachers to nominate children for 'assisted scholarships' to cover part of the fees, while London, Liverpool, Manchester and Bristol put their trust in open competition. Manchester and Plymouth allowed age to be taken into account when marking the papers. The age of admission still varied, though it was generally a little below twelve.

The method of selection was a matter to which much thought was later to be devoted.[5] Shortly before the First World War the majority used only English and arithmetic questions, though some authorities tested history, geography and elementary science. English composition was present in all written examinations. In general, the scholarship questions were sensibly centred on the elementary school syllabus, partly to eliminate the effects of excessive coaching. Bristol, London, Lancashire and Somerset based their selection on written papers alone; Middlesex, with other authorities, gave an oral examination intended to put the less well-taught child on like terms with another of equal potential. Oral examinations were difficult to arrange fairly in a county with a large child population. Durham divided itself into secondary school districts for the purpose of interviewing candidates; the West Riding, Kent, and Northumberland pursued a similar course. Cheshire and Warwickshire permitted selection to be made by the secondary school headmasters following interviews with candidates already qualified by an examination. Sheffield and Blackburn allowed their secondary school headmasters to give both the written and the oral examinations themselves. Certain localities, fearing charges of partiality perhaps, put their problems into the hands of the Oxford Local Examinations Delegacy or of the Joint Scholarships Board run by the Headmasters' Association. The Northern Universities Joint Matriculation Board helped the local authority at Stockport, and the National Union of Teachers set the test at Hemel Hempstead until 1935.[1]

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[1] *Report of the Board of Education for the Year 1916–17* (Cd. 9045), p. 31.

[2] *Education in England and Wales, 1926–27* (Cmd. 3091), pp. 22–26.

[3] *Board of Education Regulations for Secondary Schools, 1907–08*, (Cd. 3592), Prefatory Memorandum.

[4] *Report of the Board of Education for 1911–12* (Cd. 6707), pp. 18–24.

[5] Ibid. pp. 24–27.

5. NEW METHODS OF SELECTION

Francis Galton announced in 1883 the possibility of measuring intellectual abilities by simple laboratory tests.[2] It might be said that before the First World War the resulting science of testing the intellect was in its infancy: the statistical procedures were initially inadequate, and working hypotheses (including the whole structure of 'faculty' psychology) had to be recast and confirmed. Much of the research in this period was carried out abroad, in France, Germany and America.[3] Towards the end of this period Charles Spearman hypothesized the existence of a general ability, of intelligence apparent as an inborn, general, intellectual efficiency, while Alfred Binet in France introduced both the idea of mental age and the technique of group-testing.[4] The science of psychological testing became consistent just soon enough to be of use in the classification of American Army recruits in 1917. Nearly two million soldiers were then rapidly examined by objective tests and allotted to posts suitable to their capacity, a task which implied acceptance of mass testing by responsible authorities.[5]

The possibilities of such methods were striking. It was the poor child of high inborn intelligence who many felt should be given free secondary school education;

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[1] International Institute Examinations Enquiry: *A Conspectus of Examinations in Great Britain and Northern Ireland*, 1937, pp. 3–9.

[2] F. Galton: *Enquiries into Human Faculty and its Development*, 1883.

[3] *Board of Education. Report of the Consultative Committee on Psychological Tests of Educable Capacity and their possible use in the public system of education*, 1924, pp. 1–13.

[4] Ibid. pp. 14 and 22–27.

[5] C. S. Yoakum and R. M. Yerkes: *Mental Tests in the American Army*, 1920.

intelligence tests, as distinct from attainment examinations, were aimed at measuring this very quality. Group-testing as opposed to the time-consuming individual testing, allowed large numbers of children to be examined together. It appeared to be merely a matter of time before secondary school selection was to rely heavily on intelligence testing. Not only were Binet's tests of the native ability to reason revised repeatedly, but some order was introduced into ordinary attainment testing. Properly graded tests became available to teachers and examiners to assess a child's ability in reading or arithmetic.[1] The work of confirming the results by experience, of systematizing the science, of popularizing it, and finally of relegating it to the level of acceptance, was to last for decades; it still continues.

Intelligence tests were used early abroad, especially in the United States of America.[2] The English approach was more cautious, and typically lacking in uniformity.

The Clerk to the Liverpool School Board had stated in 1895 that selection of secondary school scholars should be made not so much by their attainments as by their capacities for attainment.[3] An intelligent child was being denied his birthright, claimed reformers, if his home background or poor schooling were such as to prevent his achieving his full potential. The development of this liberally egalitarian theory resulted in a mass of published work on the nature of intelligence, and on its assessment, from 1920 onwards.

In 1920, Bradford Education Authority used a number of written group tests tried out in a Liverpool research in 1911.[4] Practical tests were added to the written and oral examinations for the West Riding Junior Scholarships in 1913. The bulk of the candidates were first eliminated by the usual written tests, and the remainder were sorted with the help of a further practical test, it being necessary to solve a problem in concrete materials.[5] It was not clear whether this innovation was brought about by a desire to find intelligence independent of scholastic ability, or whether by the presence of handwork in the elementary school curriculum. The comment in the published account of the selection procedure that in choosing candidates the English was more reliable than the arithmetic paper, suggested that at least some thought was being devoted to such matters.

The peculiar nature of the Northumberland countryside, with its sparsely populated areas and its towns in juxtaposition, had led to the early introduction of tests there by Godfrey Thomson.[6] In 1921 his task was to discover gifted children, worthy of free secondary education, in the isolated rural elementary schools. Many able children from simple homes were, it was realized, handicapped in the arithmetic and essay papers of the scholarship examinations by having been taught in one-teacher, all-age schools, far away from the competition and ambition of the towns.

[1] P. B. Ballard: *Journal of Experimental Pedagogy*, 1914, II, p. 396 and 1915, III, p. 153.

[2] *Report of the Consultative Committee on Tests of Educable Capacity*, 1924, p. 37.

[3] Bryce Report, Vol. IV, E. M. Hance, Qu. 13567–13574.

[4] *Report of the Consultative Committee on Tests of Educable Capacity*, 1924, p. 37.

[5] *The Journal of Education*, October 1914, p. 682.

[6] G. H. Thomson: 'The Northumberland Mental Tests.' *The British Journal of Psychology*, XII, December 1921, pp. 201 ff.

The tests were tried experimentally at first, and showed their worth in comparison with the better-known Stanford-Binet-Simon tests in measuring intelligence quotients.

It was realized from the first that examinations in the traditional style gauged attainment rather than potential ability. The cautious, whether aware of this or not, claimed that intelligence tests failed to measure continuous application, and this quality was felt to be necessary for the new pupil in the secondary school. Intelligence tests in the American Army fashion, with 212 questions in half an hour, were regarded as unsuitable for this reason, despite their objectivity.[1] A Member of Parliament could state that 'unfortunately, native ability alone does not fit a pupil for entry to a secondary school. . . .'[2] Moreover, as the headmaster of a Liverpool school pointed out, the scholarship examinations of attainment were already tests of intelligence as well as of knowledge.[3] This last writer claimed that the best correlation with general intelligence was obtained by two tests, one of silent reading to be followed by an account of the matter, the other of simple arithmetic. This was not backed by the stack of statistics which was to be the concomitant of such statements later in the decade. The practice of the Lancashire Education Committee in 1923, mentioned by the headmaster, was to test all the elementary school children in English and arithmetic at the age of eleven, pass about 4,500 on to the written examination proper, and finally enter just over 1,000 for the oral examination.

The Headmaster of Cheltenham Grammar School had for some time given intelligence tests individually at oral examinations, as a supplement to the usual written examinations for free places.[4] Graded tests were used, devised by Cyril Burt, then a psychologist of the London County Council. The aim was to choose the boys with the greatest 'mental alertness', as distinct from those with a high standard of attainment because of good teaching or a cultured home. The Headmaster could state, after ten years' experience, that the ordinary written examinations were not fully successful in selecting the ablest, judged by the intelligence tests. His method was not exactly suited to testing on a large scale.

The Board of Education had reviewed the possibilities of intelligence testing as part of their duties in keeping the free place organization working. A Departmental Committee could lay down in 1920 that qualification for admission as a free place pupil should normally be determined by two sets of written tests, in English and in arithmetic, followed by an oral examination (with reference to school record) designed to test capacity and promise rather than attainment. All pupils were expected to be tested between the ages of eleven and twelve.[5] It was contemplated that the teachers would largely conduct the examination themselves. The Committee hoped that ultimately 75 per cent of children might go to secondary schools, and that secondary education would be provided free, following the example of Bradford, Manchester and Sheffield.

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[1] T. Raymont: Intelligence Tests. *The Journal of Education*, June 1923, p. 360.

[2] C. W. Cook: 'The Scholarship System in Elementary Schools.' *The Journal of Education*, September 1923, p. 619.

[3] C. W. Bailey: 'Scholarships and Secondary Schools.' *The Journal of Education*, September 1923, p. 621.

[4] R. R. Dobson: 'The Value of Intelligence Tests in Scholarship Examinations,' *The Forum of Education*, 1923, p. 53 ff.

[5] *Report of the Departmental Committee on Scholarships and Free Places* (Cd. 968), 1920.

The Consultative Committee which reported in 1924 drew a clear distinction between an examination to pick out those most likely to profit by secondary instruction and an examination, such as the First School Examination (the 'School Certificate') designed to reveal minimum standards of attainment.[1] A signal was accordingly given for the setting of intelligence tests whether for groups, or orally and individually, to be used experimentally at first in connection with the free place examination.[2] The need was admitted for 'follow up' studies to see whether such intelligence tests were truly predictive of ultimate success.[3] Many of the isolated experiments and methods such as those described above were mentioned in the Second Appendix to the Report, summarizing existing knowledge. The Report accepted that a greater number of secondary school places was needed if justice was to be done in educating everyone at a secondary school who was of sufficient promise.[4]

The practices adopted at Brighton reveal the way in which intelligence tests were gradually brought into use. Originally there had been two parts to the scholarship examination. The first part, in English and arithmetic, was taken in the primary schools; the second part, in silent reading, drawing, and practical measurements, together with a *viva voce* with the scholarship selection committee, came later. The total number of marks counted towards the final order of merit.[5] Intelligence tests were introduced experimentally in 1922, and were used to distinguish between borderline candidates in the next year. They were used equally with the scholastic test to select for the final part of the examination after 1924. All with an intelligence quotient greater than 120 were admitted regardless of scholastic performance, and all with 60 per cent or more in the scholastic test were admitted whatever their intelligence quotient. The examiners felt that there might be a critical intelligence quotient of about 110, below which entry would be impossible, and it was therefore anticipated that this would be of use in sorting pupils before the normal attainment tests.

A great deal of effort was to be put into perfecting the techniques employed in testing. Age differences are important to eleven- and twelve-year-olds, and enquiries were set afoot to find out simple rules for making allowances for them.[6] The Leicestershire practice in 1930 was to add or subtract 1.5 per cent of the marks for each month below or above the average.[7] It was apparent, too, that with the innovation of standardized 'appreciation', 'number' and English tests, and oral interviews, increasingly complicated arrangements were being adopted as more was being discovered about the science of testing.

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[1] *Report of the Consultative Committee on Psychological Tests of Educable Capacity*, 1924, p. 110.

[2] Ibid. pp. 118–20. [3] Ibid. p. 141. [4] Ibid. pp. 108–9.

[5] W. J. Stainer: 'Intelligence Tests in Scholarship Examinations.' *The Forum of Education*, 1925, pp. 32 ff.

[6] A. James: 'The Age Allowance for Marks in Secondary School Admission Examinations,' *The Forum of Education*, 1923, p. 218. B. C. Wallis: The Efficiency of Competitive Scholarship Examinations of Young Children, with particular reference to the effect of an age allowance,' *The Forum of Education*, 1930, p. 130.

[7] 'The Difficulties of Selective Examinations.' *The Journal of Education*, April 1930, p. 261.

The scholarship examinations had their critics, and these were not limited to those conservatives who demanded 'proper' examination papers, at least with an English essay question. Teachers in Sheffield complained that the examination used there had a narrowing and stultifying effect, leading to excessive coaching inside and outside school hours.[1] The total effect of this was not, however, felt to be dangerous by the Consultative Committee in 1924.[2] It was thought elsewhere that nervous children, and those who developed late, were not generally catered for by the selection machinery, while character and capacity to work were imperfectly assessed.[3] Some of these criticisms were partly turned aside in the more progressive districts. The London County Council awarded supplementary scholarships at 13 + to 'late developers' in all schools; 'borderliners' were all carefully interviewed in the West Riding.[4]

The Binet-Simon and the majority of the group tests were essentially linguistic, relying as they did on familiarity with pen and paper. The final resort of 'performance tests', with cardboard or wooden apparatus instead of written questions, was not used in scholarship testing. A child of high intelligence but of negligible attainment in reading and writing was becoming a rarity, and he would have been out of place in a secondary school.[5] The psychological approach in this field was to have its greatest effect, perhaps, not by pursuing the nebulous quality of abstract intelligence so much as by rationalizing the methods of testing attainments. By 1928, informed opinion accepted intelligence tests as a valuable addition to the methods of selection, methods which included the use of school records and of oral examinations as well as the more usual examination or test papers.[6] Intelligence tests were not used alone. Test papers continued to be set in English and arithmetic, but their more systematic marking was a by-product of the interest in scientific testing exploited by the psychologists.

There was lee-way to make up in some of the rural areas. As late as 1933, in Oxfordshire, there was neither scaling of marks to equalize spread, nor intelligence test, nor chief examiner for the scholarship examinations.[7]

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[1] 'Examinations in Sheffield,' *The Journal of Education*, Nov. 1929, p. 805.

[2] *Report of the Consultative Committee on Psychological Tests of Educable Capacity*, 1924, p. 103.

[3] P. Abbott: 'The Scholarship System in Secondary Schools,' *The Journal of Education*, December 1932, p. 795.

[4] Ibid.

[5] *Report of the Consultative Committee*, 1924, p. 40.

[6] Board of Education Pamphlet No. 63, *Free Place Examinations*, 1928, p. 55.

[7] J. Graves: *Policy and Progress in Secondary Education, 1902–42*, 1943, p. 146.

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6. SECONDARY EDUCATION FOR ALL

It was the policy of 'progressives' to press for more secondary education, particularly after the First World War.[1] Politicians pointed out that provision varied widely from 21 places per thousand of population in Wallasey to 1.7 in the Scilly Isles.[2] Within London it was clear that secondary education was least available in the poorest areas, with 1.3 places per thousand in Shoreditch, and 2.2 in Bethnal Green, but with 14.5 in prosperous Hampstead. On logical grounds the variety suggested that intelligent children were being denied the education they deserved, in certain quarters at least. Opinion went farther than this. In a resolution of the House of Commons that there should be more free places in secondary schools, it was mentioned that there was a wastage of potential secondary school children, a matter aggravated by the state of unemployment at the time.[3] The view of the Departmental Committee on Scholarships and Free Places in 1920 that 75 per cent of the children leaving elementary schools were intellectually qualified to profit by full-time education up to the age of 16, was specially noted. Children were said to be 'marking time in Standard VII', in the top class of the elementary schools, at the age of eleven, because they could not enter a secondary school. The lack of secondary school places was leading to examinations of excessive difficulty because of the need for severe selection, according to one Member of Parliament. The General Council of the Trades Union Congress, to name but one of the left-wing bodies, urged that all children should transfer at the age of eleven to some sort of secondary or central school, and it was this policy that was backed by the Consultative Committee in its 1926 Report on the Education of the Adolescent.[4]

The Labour Government had issued a £2 additional grant for each free place pupil beyond the necessary 25 per cent, to stimulate the provision of secondary education, for although the free place system was successful in creating secondary school places it was still not successful enough to cope with the massive demand.[5] A month after issuing the extra grant in September 1924, however, the Government left office, and the grant was withdrawn in the February of the next year.[6] It had been an expedient to create more places; the idea behind the Consultative Committee's proposals in 1926, on the other hand, reflected a completely new principle.

The theorists behind this new principle, among whom might be numbered Thomas Percy Nunn, desired that there should be a break in studies at the age of eleven, and a change of school.[7] Secondary education was intended to become 'end-on' or successive to elementary education instead of parallel to it, and superior. It was felt that all post-primary schools should be termed 'secondary', and that primary schools should concentrate on a preparatory form of education. Central schools had already been developed in the larger towns to give post-elementary education to those not selected for secondary schools; entry to these usually depended on the same examination at eleven plus which opened the door to the secondary school.[1] 'Modern schools' or 'modern classes' in existing schools, it was argued, should join with the selective schools in providing education for all senior children.[2] Here was an attempt to provide an answer to the demand for secondary school places, the shortage of which was causing the free place examinations to become highly selective and competitive. It was a move towards placing all forms of post-primary education on an equal footing, to give central schools and (of necessity) senior classes in elementary schools a similar status to the secondary schools. It tended to replace the system of selection by wealth or by intellectual competition with what might be described as diagnosis, whereby a child is allotted to the school specially appropriate to his ability and aptitudes. A headmaster, writing in 1923, could echo the hope that if secondary schools were to become 'end-on' to elementary schools, the scholarship system would lose importance, and the 'eleven plus' test would become a 'qualifying' instead of a 'competitive' affair.[3] Events did not bear out his prophecy.

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[1] R. H. Tawney (ed.): *Secondary Education for All*, 1922, p. 7.

[2] *House of Commons Debates*, 8 April 1925, Col. 2353.

[3] Ibid. Cols. 2350–2360.

[4] Board of Education. *The Report of the Consultative Committee on the Education of the Adolescent, 1926*, pp. 74 and xix (The Hadow Report).

[5] Board of Education Circular 1340, 1924.

[6] *Board of Education. Report for 1924–5*, pp. 98–99.

[7] Hadow Report, pp. 70 ff.

The Hadow Report had little immediate effect on psychological testing, perhaps because reorganization on 'Hadow' lines was such a protracted business, especially at times of economic stress. Nevertheless, tests relying more heavily on 'intelligence' than on 'attainment' questions were introduced tentatively. The Borough of Halifax had replaced its attainment examination for scholarship places with an intelligence test by 1936, gaining additional information about a child's diligence, character and interests from his elementary school teachers.[4] An extra reason for introducing intelligence tests might be mentioned at this point; they relieved teachers of any responsibility for the results of the selection, and therefore from any parental pressure. This pressure was causing children to be brought forward from the earliest age, even affecting the transfer from the infant to the junior school.[5]

London County Council was one of the many authorities using only English and arithmetic papers in the early 1930s. It was becoming obvious that these were attainment and not intelligence tests, and the questions came under criticism for other reasons also. The arithmetic questions were too few and too difficult, and there was no evidence of consistency in the marking of the essays. There were demands for shorter questions, of a more objective nature, designed to eliminate error on the part of the examiner.[6]

Further enquiries were needed to test whether intelligence measured at the age of eleven correlated highly with School Certificate results. Such results as were available indicated that many sufficiently intelligent pupils were being prevented from sitting the School Certificate examination by the selection process and this lever was used in the agitation for more secondary school places.[1] Even with so progressive an authority as the London County Council, 70 per cent of the school population were left in elementary schools after the age of eleven.[2]

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[1] P. B. Ballard: 'The Special Place Examination'. *Essays on Examinations*, 1936, p. 111.

[2] Hadow Report, p. 132.

[3] C. W. Bailey: 'Scholarships and Secondary Schools,' *The Journal of Education*, September 1923, p. 621.

[4] P. B. Ballard: op. cit. p. 116.

[5] Ibid. p. 114.

[6] Ibid. p. 115.

The concept of the intelligence quotient was one which had considerable significance. The 'I.Q.' was formed from the ratio of a child's mental age, measured by intelligence tests, to his actual age. The I.Q. of an average child would then be 100, that of a very clever child might be 140, that of a dullard, 70. The notion that the I.Q. was roughly constant for each child throughout his life played an important part in educational theory.[3] According to this, a child who was selected for his high I.Q. at the age of eleven would generally be expected to do well in later examinations at the secondary school.

The actual prognostic worth of tests could of course, be worked out scientifically, using statistics, and a greater emphasis came to be placed on forecasting in the course of time. Thus, the results of a study in predicting school achievement in 1929 gave correlations between the results of entrance tests and intelligence tests, and between each of these and a fourth year examination in a municipal secondary school.[4] The experiments were carried out over eight years, but were nevertheless open to criticism because of the relatively small number of children involved. Such studies took time to complete. The possibility of comparing success in an examination at the age of eleven with success at a later stage led to difficulties. Not every worthwhile quality was examinable, for example, and so the very aims of education needed to be considered from the beginning.

When the Consultative Committee reported on the primary school in 1931, it was still cautious about the use of group intelligence tests. It was felt unwise to rely on such tests alone, though they were said to be useful within schools, especially between the ages of seven and eight, when transferring from the infants' departments.[5] The Committee felt that examinations at eleven should be compulsory for all, lest any suitable candidates be missed; this was already the policy of at least half of the local authorities.[6]

The idea of an 'educational ladder' reaching from the gutter to the university had long attracted reformers. Kenneth Lindsay, who made a survey in 1926, said that the ladder was more like a greasy pole.[7] Of the 550,000 children leaving elementary schools annually, 9.5 per cent went on to secondary schools, one-third of them being exempted from fee-paying. Only one in a thousand proceeded to university. Of the 2,800,000 adolescents in England and Wales, 80 per cent were not in full-time attendance at school. Lindsay claimed that his survey showed that at least 50 per cent of the pupils in elementary schools could profit by some form of post-primary education up to the age of sixteen. It was clear that talent was being wasted, for less than 10 per cent of the jobs done by elementary school leavers were skilled ones, and post-primary education was ill-patronized at a time when registered juvenile unemployment alone was about 65,000, quite apart from the much larger quantity that was unregistered. The chance of an elementary school pupil entering a secondary school and so proceeding to further education or to skilled work was still relatively small.

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[1] P. B. Ballard: op. cit. p. 118. [2] Ibid. p. 111.

[3] A. G. Hughes and E. H. Hughes: *Learning and Teaching*, 1937, pp. 58–60.

[4] D. Oates: 'Predicting School Achievement,' *The Journal of Education*, August 1929, pp. 579–82.

[5] Board of Education. *Report of the Consultative Committee on the Primary School*, 1931, pp. 123 and 127.

[6] Ibid. p. 124.

[7] K. Lindsay: *Social Progress and Educational Waste*, 1926, p. 7.

Opportunity differed widely from district to district. Only 40 out of 212 schools in Oxfordshire sent scholars to secondary schools.[1] 75 per cent of the children in a well-to-do district of Bradford qualified to enter a secondary school from an elementary school, as opposed to only 34 per cent from another part of the town. The additional expense of secondary education, even when a scholarship had been awarded, resulted in 50 per cent of the first 200 on the scholarship list at Bradford declining to grasp the opportunity.[2] Lindsay gave many similar examples.

Others could still claim to be well satisfied with the existing system of scholarships. Lord Birkenhead was quoted as saying that

> 'there is now a complete ladder from the elementary school to the university, and the number of scholarships from the elementary to the secondary schools is not limited, awards being made to all children who show capacity to profit.'[3]

Lindsay marshalled his statistics in an attempt to shatter any such complacency. He concluded that, at a conservative estimate, proved ability to the extent of at least 40 per cent of the nation's children was being denied expression.[4]

7. SPECIAL PLACES

A sequence of economic disturbances led to the cutting down of public spending on education as on other social and public services. The May Committee on National Expenditure stated in 1931 that a large proportion of the total expenditure on secondary education should be met from the fees charged to parents who could afford them, and also that fees should be raised almost to private school level.[5] A saving of £1,000,000 was anticipated. Secondly, the Ray Committee on Local Expenditure echoed the same principles, recommending a change from the 'free place' to the 'special place' system, in which those parents who could afford it were made to pay.[6] A saving of £400,000 was estimated here. Government policy now dictated that educational awards should be made to vary with the circumstances of individual candidates.[7] It was pointed out by the Government that the fees charged in secondary schools were already heavily subsidized and that, while the average cost of education was £35 a year the fees ranged between £0 and £20. The fees were therefore set at a minimum of £9 per annum in the generality of secondary schools.

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[1] K. Lindsay: op. cit. p. 8. [2] Ibid. p. 11. [3] Ibid. p. 9. [4] Ibid. p. 23.

[5] *Report of the Committee on National Expenditure, 1931* (Cmd. 3920), pp. 198–99.

[6] *Report of the Committee on Local Expenditure 1932* (Cmd. 4200), pp. 30–31.

[7] Board of Education. *Education in 1932* (Cmd. 4364), p. 16.

The fresh principle, that those who could afford to pay should do so, was less harsh than it appeared. 49.4 per cent of the pupils were totally exempt from fees in October 1933, and 3.6 per cent partially.[1] 46.9 per cent were exempt, and 9.7 per cent partially, in 1938. It might be added that the number of schools had continued to rise to 1,398, despite the cuts earlier in the decade.

The principle of the special place system was extended by the Consultative Committee in its 1938 Report on Secondary Education.[2] The Spens Committee, as it was known, felt that a 100 per cent special place system was necessary except in the case of direct grant schools, for whom a smaller percentage of free or aided pupils was envisaged. In the ordinary secondary schools it was suggested that at least half the pupils should be selected academically.[3] It should be noted that the proposed special place examination was only suitable for public elementary school children; many secondary schools still had their preparatory schools attached. Those not selected competitively in the tests at eleven plus might qualify for a place in these same examinations, and then be selected for the grammar school places by headmasters or selection committees on personal grounds, or on the recommendation of primary school teachers.[4]

Free education at primary and secondary school levels was to be one of the features of the 1944 Education Act which dominated postwar educational reconstruction.[5] The 1938 Report influenced the 1944 Act, and another important factor affecting educational thought at this time was the Report of a Committee of the Secondary School Examinations Council in 1943, known as the Norwood Report.[6] In this last document it was urged, in effect, that the Hadow reorganization should be completed. It was felt that secondary education should start for all at the age of eleven, and the 'tripartite' system was advocated, with grammar schools, technical schools, and modern schools.[7] The division of children into three types may be criticized as being an administrative convenience to suit the existing distribution of schools, but the tripartite doctrine was to flourish after the War ended. Selection was a necessity for this system because of the popularity of the grammar schools, and testing was given a fresh impetus. The diagnostic function of teachers was given much emphasis in the Report. The necessity of taking account of age differences and special abilities was mentioned, the use of a school record being very important.[8] Intelligence and performance tests were held to be useful in a supplementary fashion. The need to give a child the education appropriate to his special abilities was to lead to the assertion in the 1944 Education Act that children should be given an education suitable to their ages, abilities and aptitudes.[1] The diagnosis was to continue in the first two years of the secondary school.[2] Subject to these conditions, consideration was to be given to the parents' choice. It will be shown how an optimistic view of the balance between a variety of types of secondary school came to grief when faced with the continued, or even increased, demand for a grammar school education.

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[1] Board of Education. *Report for 1938* (Cmd. 6013), pp. 14–15.

[2] *Report of the Consultative Committee on Secondary Education*, 1938, p. 378.

[3] Ibid. p. 379.

[4] Ibid. p. 327.

[5] Education Act, 1944, Section 61.

[6] Board of Education. *Curriculum and Examinations in Secondary Schools*, 1943.

[7] Ibid. pp. 2–3.

[8] Ibid. pp. 16–17.

8. COMPREHENSIVE SCHOOLS AND THE TRIPARTITE SYSTEM

The growth of secondary education in all its forms was striking in its variety after the 1944 Education Act. Local authorities were required to make development plans under the Act, and they attempted to provide the type of school which they felt their areas needed.[3] Some favoured the tripartite system of grammar, modern and technical schools; others introduced bilateral or multilateral schools, with two or more 'sides'. Others again, notably London and Coventry, put their faith in comprehensive schools. Seventeen of these were under construction in 1953, and ten more were planned and approved.[4] In the cities, at least, these were very large establishments, taking the majority of the children in a neighbourhood.

The tripartite system had emerged for historical reasons, being an immediate development of the original system of secondary or grammar schools with a few technical and central schools, and some accretions following the Consultative Committee's Report in 1926. The existence of buildings constructed before the War naturally affected planning and conditioned thinking to a large extent. The theoretical justification of the tripartite scheme provided in the 1943 Report of the Norwood Committee on so-called psychological grounds, really appeared to go little beyond confirming the *status quo*, though parity of esteem between schools was implied.

In 1947 the Ministry of Education formally defined the different types of secondary school that were under consideration.[5] Three broad groups were formed on the traditional basis, but the emergence of bilateral, multilateral, comprehensive and 'campus' schools was admitted. A Ministry pamphlet issued in the same year nevertheless assumed that the three existing types of school would be used in the main.[6] The heightened interest in the results of the selection procedure for the grammar school attended the tripartite schemes; competition for places increased, and 'allocation' degenerated into 'pass or failure'.[7]

'Equality of opportunity' was adopted as a principle for education, and its consequences were worked out remorselessly after the War. In pursuing this nebulous theme, certain powerful groups concluded that it was necessary to introduce the idea of a comprehensive school, for teaching children of all abilities. Separation into types was thought to be unrealistic, incorrect and impolitic, certainly at the early age of eleven. It was felt that children should educate each other and learn how to live socially with those of different backgrounds, abilities and future careers.[1] Comprehensive schools came into existence, therefore, backed by those with a taste for social living and with a distaste for much of the competitive atmosphere of a grammar school and its selectiveness. The London County Council's decision to build up this form of education was watched with particular interest. The new comprehensive schools were intended ideally to cater fully for every child in the neighbourhood, and they were necessarily large because they had to provide specialist classes and sixth forms of an economic number.[2] The great size of the schools was one of the bones of contention.[3]

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[1] Education Act, 1944, Section 8.

[2] *Curriculum and Examinations in Secondary Schools*, p. 17.

[3] Education Act. 1944, Section 11.

[4] Ministry of Education. *Education in 1953* (Cmd. 9155), p. 7.

[5] Ministry of Education Circular 144. Organization of Secondary Education, 16 June 1947, Section 3.

[6] Ministry of Education Pamphlet No. 9: *The New Secondary Education*, 1947.

[7] A. Yates and D. A. Pidgeon: *Admission to Grammar Schools*, 1957, p. 174.

Anglesey had developed its own relatively small comprehensive schools in a rural area and had some evidence of success to show by 1953.[4] Achievement could be most effectively demonstrated by comparing numbers of passes in the General Certificate of Education with those of grammar schools, for tripartite supporters stated that a comprehensive system was likely to reduce all to a low level of attainment. A great advantage claimed for the comprehensive schools was that certain late-developing pupils could, and did, enter with low attainment at the age of eleven, and yet do well in external examinations five years later.[5] Opportunity was not suddenly and finally withdrawn from these at the age of eleven. Nearly half the local authorities were experimenting with some form of non-tripartite education by 1957 in an attempt to blur any sharp differentiation at this early age.[6]

Critics of the eleven plus tests could state that selection was unfair in giving equality of opportunity. Some felt that verbal tests, even tests of intelligence, tended to favour the middle-class child from the more cultured home, and the selection was therefore considered to be weighted despite other research results to the contrary.[7] Sociologists at the London School of Economics and elsewhere began to study the extent of social mobility to see, for example, what percentage of unskilled manual workers' children entered professional careers.[8] The London School of Economics studies showed, amongst other things, that although most parents were eager for their children to enter a grammar school, indifference varied considerably from class to class, and this must have had an effect upon the process of selection. Professional people, at one end of the scale, were much more concerned with securing a grammar school education for their children than the unskilled workers at the other end.[1]

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[1] Labour Party Programme, 1953–54, quoted in B. Simon: *The Common Secondary School*, 1955, Appendix III, p. 170.

[2] London School Plan, 1947, p. 13.

[3] J. Thompson: *Secondary Education Survey; An Analysis of L. E. A. Development Plans for Secondary Education*, 1952, p. 19.

[4] R. R. Pedley: *Comprehensive Schools Today*, 1955, p. 3.

[5] Ibid. pp. 4–6.

[6] A. Yates and D. A. Pidgeon: op. cit. pp. 22–23.

[7] Ibid. p. 189.

[8] D. V. Glass (ed.): *Social Mobility in Britain*, 1954.

Before the 1944 Education Act, an adult's social status depended very largely on his father's, to which was linked also the type and level of the education received.[2] The great expansion of educational opportunity by 1939 had apparently affected social mobility surprisingly little, and a child's chance of receiving a secondary education and thus, ultimately, of improving or consolidating his social status, still depended markedly upon his father's social class. When the enquiry was continued later, the chances of an unskilled worker's child entering a grammar school had actually dropped despite the free education available, while the sons of professional and business men were at as great an advantage as ever, even though they could no longer claim secondary education merely by paying for it.[3] There seemed to be weighty evidence to suggest that educational opportunity varied from class to class in 1953. Heredity and environment both appeared to play their parts in determining ability. Men might pause to consider whether the educational ladder from the gutter to the university was functioning as expected.

An important criticism of selection concerned its effect upon the primary schools.[4] The scholarship test, as it was known at the beginning of the century, and as it was still described sixty years later, frequently led to special preparatory classes in the primary schools. Teachers, eager to do their best for their pupils, taught with the test very much in mind; the undue prominence given to it was mentioned at least as early as 1931.[5] With selection came the whole business of streaming by ability, a matter mentioned in the 1931 Consultative Committee Report on the Primary School on the grounds of efficiency and economy of effort.[6] This could lead to selection beginning effectively at the age of seven. It was thought by some critics that streaming led to the bright children improving in ability, while the duller ones grew duller.[7] Opinions differed as to the advisability of streaming in the primary school, but certainly it was the necessity of selecting children for a grammar school education that often inspired it.

The idea of an educational élite, reared in the grammar schools, led to some controversy. Not unnaturally, many parents wished their children to join its ranks, and competition for places remained at a high level. The provision varied, however, from one county to another, lying between ten and thirty per cent of secondary school places in English counties.[8] It was particularly annoying for a parent to have his son 'fail the scholarship' in a county with relatively few grammar school places when his neighbour's son, dwelling in the next county, was successful because of the greater percentage of places available. The grammar school remained the gateway to the professions, and such discrepancies in provision irritated and worried parents.

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[1] F. C. Martin: 'An Inquiry into Parents' Preferences in Secondary Education,' pp. 62 ff. D. V. Glass (ed.): op. cit.

[2] J. R. Hall and D. V. Glass: 'Education and Social Mobility,' p. 291. D. V. Glass (ed.): op. cit.

[3] J. E. Floud (ed.), A. H. Halsey and F. M. Martin: *Social Class and Educational Opportunity*, 1956, pp. 40–41.

[4] L. P. F. Miller: 'The Day to Day Effects of Selection on the Primary Schools,' pp. 33 ff. E. Blishen (ed.): *Changing Schools, the Problems of Selection and Some Solutions*, 1959.

[5] Board of Education. *Report of the Consultative Committee on the Primary School*, 1931, p. 131.

[6] Ibid. pp. 77–79.

[7] L. P. F. Miller: op. cit. p. 37.

[8] A. Yates and D. Pidgeon: op. cit. p. 23.

The obverse effect of selection to that of hastening on the able was noted by Professor Philip Vernon.[1] He observed that while children in grammar schools improved in their tested intelligence quotients, I.Q.s in secondary modern schools tended to deteriorate. This disproved the idea of an I.Q. being constant for all time, and revealed an unsatisfactory facet of selection. Sir David Eccles, the Minister of Education, commented on the theory that 'the more you designate as sheep, the more dejected will be the goats that remain'.[2] Alfred Yates and D. A. Pidgeon, a little later, found no significant change in tested intelligence, so the matter remained open to individual opinion.[3]

The fact that late developers emerged, ripe for grammar school education, having 'failed' the eleven plus test, was embarrassing. Still more embarrassing for the selectors was the fact that many of those who were selected at the age of eleven left school as soon as possible, having prevented others from benefiting from an extended education.[4] In 1954, over one-quarter of those who passed into the grammar school at eleven years of age either left school early or failed to gain three passes at the Ordinary level of the General Certificate of Education, and this indicated that the eleven plus tests were inadequate for the task of selecting children for a lengthy academic form of education, however well they might assess intelligence. Middle-class parents, intent on keeping their children at school for the fullest possible education patronized the independent schools, and sometimes found their 'eleven plus failures' emerging with passes in the General Certificate of Education.[5]

The supporters of comprehensive schools could claim that their system disposed of the necessity for external tests, though their own methods led, in fact, to streaming within the schools, and therefore to a similar end result. Testing became internal rather than external.[6] This was the theory, at least, but the continued existence of grammar schools in London and elsewhere implied the need for external testing.

The heat generated by 11 + testing was finally to lead to its importance being minimized by the local authorities. As statements in the Press revealed the existence of coaching establishments, bribery of the children by parents, or the passing into coveted grammar school places of intelligent slackers, so, gradually, were the tests made by the authorities to appear less seemingly pretentious. Alterations in testing procedure were frequently described as the 'abolition of the eleven plus'.[1] The formal examinations were sometimes replaced by a battery of several tests, given unannounced in normal lesson time. In other cases, selection was concentrated upon the doubtful pupils, the borderliners. In some areas greater reliance was placed on teachers' reports from the primary schools. Some of the tension and parental hysteria were thus reduced.

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[1] *The Times Educational Supplement*, 6 May 1955, p. 447.

[2] Ministry of Education. *Central Advisory Council Report on Early Leaving*, 1954, Foreword, p.v.

[3] A. Yates and D. A. Pidgeon: op. cit. pp. 171–73.

[4] *Central Advisory Council Report on Early Leaving*, 1954, p. 5.

[5] Lady Simon of Wythenshawe: 'Trends in Secondary Education', E. Blishen (ed.): op. cit. p. 64.

[6] H. C. Dent: 'From Figments to Facts,' p. 36; R. R. Pedley (ed.): *Comprehensive Schools Today*, 1955.

9. 'THE ELEVEN PLUS'

Fresh light was thrown upon the nature of the tests themselves in the postwar period. There had been complaints, for example, of extra coaching for the eleven plus examination, and research was carried out to find out the true extent of this. It was revealed that coaching did, indeed, affect performance in the test, and was therefore likely to affect the just allocation of children to secondary schools. The National Foundation for Educational Research worked upon the problem, and simple measures were suggested for countering the practices. The setting of a minimum number of trial tests for each child was found to be effective, for example, in making equality of opportunity less dependent on home or school environment.[2]

The methods at the disposal of selectors were summarized in a Report of the National Union of Teachers in 1949. The recommendations of the reporting committee called for standardized tests, scientifically designed, with English, arithmetic and intelligence papers. An important point was made in calling for the primary teachers' opinion, given in the form of an order of merit for the children in each school.[3] Oral examinations other than by medical officers or by qualified psychologists were said to lack objectivity. One of the consequences of current selection was that the grammar schools, which had the right to take the most able intellectually, were not necessarily to educate those children with the highest moral character, or those most likely to make a useful contribution to school life.[4] It was good character or amenability that might be assessed at an interview. Confusion existed as to the purpose of the grammar schools, some holding that they should be places for educating the children of high intelligence, others claiming that those alone should be educated there who would stay the full course. The large number of children failing to make the most of their grammar school opportunity has already been mentioned.

The N.U.T. Report laid great emphasis upon the need for consultation with parents in choosing the right school, though with the demand for grammar school places at its current level this must have been an optimistic view of reality. The Report reviewed existing practice, revealing the extent to which class teachers were involved in the work of testing.[5] Coming as it did from a teachers' organization, the N.U.T.'s insistence on greater responsibility for teachers was not surprising. But the dangers of parental influence on the teachers remained ever-present.

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[1] *The Times Educational Supplement*, 24 October 1959; article on Oxfordshire, p. 1556.

[2] A. F. Watts, D. A. Pidgeon and A. Yates: *Secondary School Entrance Examinations*, 1952, pp. 31–34.

[3] National Union of Teachers: Report of a Consultative Committee. *Transfer from Primary to Secondary Schools*, 1949, pp. 74 ff.

[4] Ibid. pp. 47–49.

[5] Ibid. p. 95.

The existence of the tripartite system of secondary education came to be justified by its supporters very largely by the efficiency of its eleven plus testing. Equality of opportunity, it could be claimed, demanded assessment of potential ability in a pupil, and then allocation to a suitable school. The art of testing was becoming highly refined. Tests could be designed and checked for reliability and for validity, according to the customary criteria of effectiveness.[1] Reliability implied that similar tests would yield a similar result at each application, and the development of objective tests with a large number of short questions had helped to achieve this. Validity was less easy to determine, for it demanded a close correlation between test results and the quality that was being tested; a prognostic attitude was implied. The measurement of validity demanded lengthy 'follow-ups', to compare success at 16 +, for example, with success at 11 +, and less had been done in this direction than in checking reliability. Validity raised more awkward questions concerning the nature of success and the meaning of intelligence.[2] Once the predictiveness of a test could be established, the hypothesis of a constant intelligence quotient might be abandoned; it was this rule of thumb that had lain behind much of the earlier intelligence testing.

Postwar research showed, in fact, that the eleven plus tests were more highly predictive than ever, but that up to 10 per cent of the pupils were wrongly selected for their secondary school places. Of these, a small proportion was later reallocated.[3]

Criticism of the selection procedure, whether implicit or explicit, led to still greater care being taken. There had been ample time for a full understanding of the methods available to be broadcast by the end of the Second World War, and local authorities went to considerable lengths to ensure that the best methods were used, and that there was maximum fairness. It was a pity that tests, however perfect, led to a small but ever-present percentage of wrong allocations, but such was the nature of the human material that was being examined.

Local authorities varied widely in their procedures, though there was a growing tendency to place greater reliance upon the teachers.[4] The County Borough of Barrow-in-Furness renamed its eleven plus examination board in 1946, calling it the Entry Classification Board, a body made up of the head teachers of the primary and secondary schools, together with a few administrators.[5] The duties of this Board were to choose the objective tests which were to be spread over the school course and which, with cumulative records, were largely to determine selection. The Board was to supervise the selection procedure, with due regard to parents' wishes, making initial entry classifications for each pupil, and reconsidering these if parents appealed against them. Some means of overcoming a wrong allocation was secured by the provision of a common core in the curriculum during the first two years at the secondary schools; this continued the diagnostic period and facilitated the transfer of late developers. The methods adopted at Barrow-in-Furness eliminated many of the errors in selection machinery, causing selection to depend upon no one examination but upon continuous and extended observation.

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[1] C. Spearman: 'Note on the Reliability and Validity of Measurements,' *Essays on Examinations*, 1936, pp. 108–9.

[2] A. Yates and D. A. Pidgeon: op. cit. pp. 50–56.

[3] Ibid. p. 192.

[4] Ibid. p. 26.

[5] County Borough of Barrow-in-Furness Education Committee: *Classification for Secondary Education*, 1946, pp. 16–17.

Another move in the direction of professional guidance, as distinct from competitive selection, could be observed in Wiltshire. Here it was the practice to set tests in English and arithmetic at the age of eleven, together with an intelligence test which received a double weighting.[1] Primary school teachers were, however, required to give each candidate two gradings, one for observed character, intelligence and promise, and the other for suitability for grammar school admission. Records of reliability, keenness, initiative, and other qualities were also requested. The ultimate orders of merit for grammar school placing were determined by the secondary school headmasters, subject to the supervision of final selection boards. Here then was an attempt to counter any lack of the personal touch; it was described as a 'case history method'.

The London County Council's secondary education policy demanded the existence of large schools. Whenever possible, these were intended to be comprehensive schools, or schools complementary to existing voluntary schools.[2] Some form of selection was required, both as a temporary and as a permanent measure. Large schools took a long while to build and set in operation, and so selection was required in the meantime. The existence of well-established grammar schools made the problem a continuing one as well. In the long-term view, it was a principle of the Council's transfer procedure that the appropriate courses should be available to suit each child's interests and abilities, and some assessment of these was therefore felt necessary.[3] The 'Junior Leaving Examination' was arranged for the majority of eleven-year-old children, and the results provided one, but only one of the factors taken into account in advising parents upon the choice of school. Increasing importance came to be attached to the views of the head teachers of the primary schools.[4] The future of each child was considered by local advisory committees, special attention being paid to the borderline cases. These committees were made up of head and assistant teachers in both primary and secondary schools. There were moves to do away with the one day examination in 1963.[5] Reports in the newspapers suggested that the eleven plus examination was to be ended, but it was only intended to replace a one day test with a more extended series, and to make greater use of records.

The Wigan Education Committee adopted the 'psychograph' method, whereby a profile of each pupil's abilities was drawn on a graph.[6] Recorded on a card were the standardized results of two intelligence tests, an arithmetic test together with teacher's assessment, an English test and teacher's assessment, and also an average

[1] F. C. Happold: *Vision and Craftsmanship*, 1949, pp. 91 ff.

[2] London County Council. *The London Education Service*, 1961, p. 24.

[3] Ibid. p. 26.

[4] Ibid. pp. 26–27.

[5] *The Times*, 2 July 1963, p. 6.

[6] K. H. Reese Edwards: *Classification for Secondary Education*, 1951.

mark. 'Flop' scores were ignored, to eliminate an unusually poor performance in any one test, but apparently little trouble was taken over borderline cases.

The method adopted in Lincoln did away with the need for a written examination.[1] Each child was given an intelligence test, while the primary school teachers were required to place their entrants in order of merit within each school.

The use of intelligence tests was abandoned in Hertfordshire in 1953.[2] Whereas such tests had once been thought to guarantee the objectivity of selection and give results that were virtually free of environmental influence, surveys now suggested that these tests were biased against pupils from working-class homes. For this, and for other reasons, other local authorities followed Hertfordshire's lead.

The variety of ways utilized by local authorities to allocate children at the age of eleven has been indicated very briefly. The care that was taken to ensure fairness was sometimes criticized on technical grounds, but the labour involved was considerable. The procedure remained at first only a selection machinery for admittance to the favoured grammar school. The importance of the matter to so many parents gave it news-value to the Press, and the number of articles on the subject, whether informed or uninformed, multiplied enormously. There were nearly one hundred and fifty local authorities, each with its own procedure, so that a clear view over the whole field was difficult. The Ministry of Education was unable to say how many authorities had 'abolished the eleven plus' by 1963.[3]

Alfred Yates and D. A. Pidgeon went into the subject thoroughly in their Third Report for the National Foundation for Educational Research.[4] The lack of uniformity was most noticeable: some authorities used intelligence tests and some did not; some set essay questions and some used only objective tests of attainment. Yates and Pidgeon, summarizing past researches, stated that a set of standardized tests gave the best prediction of success in grammar schools, while teachers' estimates proved useful if they were properly scaled.[5] Certain examinations of the traditional type which were still in use in some areas nevertheless gave high prediction, and evidence was not clearly in favour of any one method. In their own researches, Yates and Pidgeon found that the scaled assessments of the primary school teachers were the most reliable, and were best applied in conjunction with a verbal intelligence test, used partly as a means of comparing the teachers' assessments between schools.[6] A special procedure for checking borderline candidates was also recommended.[7] However, those personal qualities which played such a large part in ensuring a good grammar school career were difficult to test objectively.

The local authorities went to some trouble to 'play down' the importance of the tests. Schemes to diminish the relative importance of the examination in the assessment machinery were reported as the 'abolition of the eleven plus'.[1] The fact that the existence of selective schools implied selection of some sort was apparently lost to journalists who preferred to play upon the sensation of the word 'abolition' in this context. Few families had escaped some form of involvement with the eleven plus test, and any excitement was magnified a dozen times by interested parties, by politicians and the Press. 'Abolition', as it was popularly known, was being arranged for Durham, Manchester and Norwich in 1963, as well as for London.[2]

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[1] A. Sutcliffe and J. W. Canham: *Selection for Secondary Education without a Written Examintion*, 1945.

[2] J. Floud and A. H. Halsey: 'Intelligence Tests, Social Class and Selection for Secondary Schools,' *British Journal of Sociology*, VIII No. 1, March 1957.

[3] *The Times*, 2 July 1963, p. 6.

[4] A. Yates and D. A. Pidgeon: *Admission to Grammar Schools*, 1957, p. 26 ff.

[5] Ibid. pp. 46–48.

[6] Ibid. p. 76.

[7] Ibid. p. 191.

In all cases of 'abolition', since selection was generally as necessary as ever, greater reliance had to be placed on teachers' reports, and internal testing and assessment within the primary schools. That this could be done reflected well upon the integrity of the teaching profession. Increased responsibility in such a matter implied that teachers were earning the dignity of a recognized professional body. It was pointed out by an educational administrator that people accepted the verdict of a medical doctor, and they should similarly accept the diagnosis of teachers in allocating their children to suitable secondary schools.[3] Teachers had the advantage of being able to observe the patient for several years before coming to a decision, but they were at the disadvantage of discriminating between people rather than between ailments. A doctor might make a wrong diagnosis because of incompetence, but there was always the danger that a teacher might make a wrong one because of favouritism. Dependence upon teachers demanded some carefully balanced selection machinery. The comprehensive school was one of the few alternatives to selection in some form or other, and even this relied upon internal selection.

10. STAVING OFF EARLY SELECTION

Two other developments acted in such a way as to overshadow the assessment and selection machinery. One was the increased provision of facilities for education in the secondary modern schools. The other was the splitting of secondary education into two successive stages.

The first development reflected popular demand, and was quickly backed by the Ministry of Education. Parents wished their children to stay longer at school to improve their qualifications. It will be shown in later chapters how pupils were entered in increasing numbers for the General Certificate of Education, as well as for such other examinations as those of the Royal Society of Arts and the College of Preceptors. Fifth forms, and even some sixth forms, began to sprout in the modern schools as courses were developed in engineering, nursing, commercial, and other more academic subjects.

Surveys revealed that not only the parents but also the children wished for an extension of schooling.[4] It was felt that about forty per cent of the modern school population wished to follow a five-year course when the Central Advisory Council reported in 1959. The Government's answer was to encourage 'extended courses' in secondary modern schools. First, the Minister of Education showed interest in the development of examination courses in secondary schools, a matter which was to bear fruit more fully in the 1960s.[1] The Government published a White Paper in 1958, announcing its intentions of asking the local authorities directly to provide more extended courses.[2] The raising of the school-leaving age to sixteen, and the development of suitable examination systems were problems connected with the trend of popular demand. Comparatively few extended courses were available before 1954, and it is to be suspected that clamour for extended opportunity in the shape of fifth year courses in modern schools was at its greatest when the postwar 'bulge' came to be crammed through the educational machine.[3] The existence of so many borderline candidates raised numerous questions of selection, and it would have been unfair to have ignored the modern school pupils.

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[1] Kent Education Committee. *Education in Kent, 1953–58*, 1959, pp. 32–33.

[2] *The Times Educational Supplement*, 14 June 1963, p. 1,307, and 12 July 1963, p. 57.

[3] *The Times Educational Supplement*, 14 June 1963, p. 1,307.

[4] Ministry of Education. *Report of the Central Advisory Council for Education.* '15 to 18.' 1959, pp. 63–67.

The second approach to deferring the process of selection was revolutionary rather than evolutionary. Leicestershire County Council initiated a scheme which sent all children to schools of equal parity at the age of eleven; these were named 'high schools'. Those parents undertaking to keep their children at school for a further two years from the age of fourteen could then send them to a grammar school. Final grammar school selection was therefore postponed, with a consequent decrease in tension in the primary school. Selection in the competitive sense was theoretically abolished by this move, as it was intended that grammar school education should be made available to all who wished to have it. Those conscientious parents who wanted to keep their children at school despite a low level of attainment were thus assisted. It was hoped that the grammar school would regain something of its prewar position as an institution designed to give a course of longer duration to those whose parents felt this was worthwhile. There was, of course, a difference in entry age, and there were no fees.[4]

The Leicestershire scheme began to operate in two areas of the county in 1957.[5] It had the advantage of comprehensiveness, of postponing selection and of keeping the gateway to opportunity open, together with the advantage of using the relatively small existing buildings. One of the practical reasons for introducing the scheme was the emergence of 'grammar school courses' for a few pupils in the modern schools, a necessity if parity of esteem was to be achieved under the old tripartite system, but a strain on the staffing situation.[6] Vocational courses were to be retained in the high schools for those pupils wishing to stay for a year after the statutory leaving age, and similar arrangements were made possible in the grammar schools for the non-academic pupils who wished to stay up to the age of eighteen.[7] Oddly enough, a special selection was to be made at the age of ten of a small percentage of 'high fliers' who were ultimately to take their grammar school examinations a year early, having entered the high schools ahead of time.[1]

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[1] Ministry of Education. Circular No. 289, 1955.

[2] Ministry of Education. *Secondary Education for All, a New Drive, 1958* (Cmnd. 604).

[3] *Report of the Central Advisory Council.* '15 to 18'. p. 66.

[4] S. C. Mason: *The Leicestershire Experiment*, 1957.

[5] Ibid. p. 3. [6] Ibid. p. 6.

[7] Ibid. p. 10.

The Education Department of the County Borough of Croydon had made a detailed study of alternative methods of secondary education, and these were gathered into a report in 1962.[2] A special sub-committee favoured the abolition of competitive selection at 11 + for all except those 5 per cent going to independent or direct grant schools, and suggested that all local sixth-form work be carried out in one sixth-form college. The local education authority adopted the idea, and the sixth-form college scheme was launched.[3] All children going to maintained secondary schools were then to begin their education in common secondary schools which were to run O level courses. Those children wishing to follow A level courses were to change school at the age of sixteen.

Other schemes of selection were considered elsewhere. The wish for a postponement of selection was one dominant driving force, but another was the need to use staff and existing buildings economically. Both Stoke-on-Trent and Rotherham considered the introduction of a two-tier scheme.[4] Carlisle adopted a plan allowing the contributory schools to develop suitable sixth-form courses, but sending some of the pupils to art and technical colleges. This was described locally as a scheme for abolishing the eleven plus.[5] Comprehensive schooling was supported in Derbyshire as a matter of principle, but a two-stage plan was agreed in certain areas because of the building situation.[6] By 1964 several authorities had agreed to a different reorganization of secondary education which involved sending all children at the age of eleven to common 'high schools'. Those wishing to continue their schooling to the age of eighteen were to move at thirteen to the grammar schools.[7] The Doncaster Plan, as it came to be known, preserved the values of the grammar schools, while permitting G.C.E. courses in the high schools. Special cooperation between the parents and the teacher would be necessary at the age of thirteen.

The great advantage of such new developments as these was that hope could be given to the child who would not have been selected at the age of eleven. The Ministry of Education appreciated that many children of approximately equal ability were receiving their education in schools that differed widely both in quality and in the range of courses that they could offer.[8] The Ministry realized that ambition should not be checked at an early age, and the shortage of skilled manpower reinforced the official point of view. Ever-increasing numbers of parents wished to keep their children at school beyond the age of fifteen voluntarily, and the Government's policy was to encourage the provision of good facilities for these before raising the compulsory school leaving age to sixteen.[1] The five-year building plan announced by the Government in 1958 was intended to result in greater opportunity within the secondary schools; as opportunity expanded, some of the pressure of criticism of the eleven plus selection machinery seemed likely to decrease.

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[1] S. C. Mason: op. cit. p. 10.

[2] County Borough of Croydon. *Secondary Education in Croydon, a Consolidated Report*, July 1962.

[3] *The Times Educational Supplement*, 27 July 1962, p. 113.

[4] R. Pedley: 'Two-Tier Secondary Education, the Latest Phase,' E. Blishen (ed.): op. cit. p. 110–11.

[5] Ibid. p. 111.

[6] Ibid. p. 112.

[7] *The Times Educational Supplement*, 6 March 1964, p. 579.

[8] Cmnd. 604, pp. 4–5.

In general, selection or allocation was becoming more continuous, and less dependent on performance in one or two early tests or examinations. Of course, the need for some sort of machinery remained as long as teachers doubted the wisdom of teaching children of markedly different abilities in the same class-room.[2] The word 'selection' became less odious as it became less final.

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[1] Cmnd. 604, pp. 3 and 9.

[2] H. Rée: 'The Advantages of Selection,' E. Blishen (ed.) op. cit. p. 74.

CHAPTER SIX

Entrance to the Universities

1. THE SECONDARY SCHOOL EXAMINATIONS COUNCIL

The growth of secondary school examination systems has already been described up to the year 1917, when the Secondary School Examinations Council was first formed.[1] Secondary education became more widespread in the course of the twentieth century, and the effect of the examination system increased with it. The work of the Examinations Council demands to be studied in some detail not only because of the ever-increasing number of candidates but also because of its influence on the actual curriculum of the schools.

In many ways the new examinations grew directly out of the existing system. There was, however, an important change of principle: the Board of Education took on the task of coordinating the activities of the separate bodies on an expanding scale. The lack of uniformity began to diminish from 1917 onwards, and at the same time the examinations were gently used to promote central policy. The Board of Education, and later the Ministry, drove the machine with an easy rein, and a more frequent danger at first seemed to be that an individual university or examining body might turn into a runaway, rather than that the driver might use the whip. Thus, London University refused to alter its matriculation requirements between the wars, declining to accept evidence from any other examining board but its own without actually seeing the papers of individual candidates, and even refusing bluntly to cooperate with the other bodies.[2]

The Board of Education nevertheless made it clear from the beginning that it intended to retain control, when it put forward its proposals in 1914.[3] The Board was to be the coordinating authority of the several examining bodies, and the Secondary School Examinations Council was to be conjured into existence to advise it. It was proposed at the same time that His Majesty's Inspectors should develop close links with the examining bodies. The Examinations Council was virtually bound to consult the Board of Education on questions of principle or policy. Central control was assisted by financial limitations, and by other central regulations in the maintained schools. Regulations deterred pupils from entering for tests below the level of the First Examination, designed for those aged sixteen, while a £2 per capita grant encouraged schools to enter them for the approved examinations.[4] Children in state-aided schools were thus discouraged from entering the Junior Local Examinations, besides those of other non-university boards. Only the First Examination, and the Second Examination for those aged eighteen were formally recognized. The purpose behind the ruling was that the number of examinations should be severely reduced, and it reflected an attempt to free the schools from the tyranny of a system which had allowed children to take one examination after another throughout the school course.

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[1] See Chapter 3.

[2] J. A. Petch: *Fifty Years of Examining*, 1953, pp. 192–93.

[3] Board of Education Circular 849, July 1914.

[4] *Board of Education Regulations for Secondary Schools, 1918* (Cd. 9076), Sections 35 and 44.

The Secondary School Examinations Council was at first composed of three classes of members, apart from a chairman appointed by the Board of Education. There were originally nine representatives of the examining bodies, four (and later five) nominated by the various associations of local authorities, and five (later six) by the Royal Society of Teachers.[1] By 1936, each of these groups contained 10 members.[2] There were 31 members besides the chairman in 1947; five from the Ministry, eight from the local authorities, eleven from teachers' associations, six from the universities, and one from the Central Welsh Board.[3] It should be observed that, when the Council was reconstituted after the War, there were no representatives of the initially powerful examining bodies; in such a way had the balance of power altered. The Central Department was represented from the first, for three inspectors attended as assessors of the Board of Education, though they did not vote.[4] When the Council was again reconstituted in October 1961, to allow a larger representation from the non-selective schools, the Ministry took the opportunity of increasing its own nominees from five to eight.[5]

The Board's policy began to emerge after 1914 in a spate of circulars. Circular 849, in July 1914, was designed to invite discussion; others followed as the situation crystallized.[6] First, there was the need to limit the number of examinations affecting secondary schools. Secondly, there was a desire to coordinate matters smoothly, at the same time allowing the existing university examining bodies to maintain their influence, and enabling the Board of Fducation to benefit from their considerable prestige. Thirdly, there was a wish to bring teachers into a closer relationship with the examining bodies than that which already existed. This last objective was to be attained in several ways, by consultation, by representation of the teachers on the examining bodies themselves, by allowing the teachers to submit syllabuses, and by giving head teachers the right to proffer estimates of their pupils' performances.[7] In addition to these relatively limited aims, there was the larger matter of rethinking and defining the long-term purposes of the examinations. These long-term functions evolved considerably as conditions altered in the schools.

The First Examination was designed for the fifth form to test the results of the course of general education in the first five grammar school years. The form, and not the individual, was to be the unit, while the pass standard was to be such as might be expected from pupils 'of reasonable industry and ordinary intelligence in an efficient secondary school'.[1] The papers were to be easy, but the standard of marking high. The examinations were intended to assess competence, not to provide a means for competition. They were designed to follow, and not to affect the curriculum. They therefore differed from the Oxford Locals of 1858 which emphasized competition and were planned to affect the schools, if not in the actual curriculum then in a more general way.

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[1] Board of Education Circular 1010, 12 September 1917.

[2] Board of Education Circular 1448, 24 March 1936.

[3] Ministry of Education Circular 113, 26 June 1946.

[4] *The School Certificate Examination, being the Report of the Panel of Investigators appointed by the Secondary School Examinations Council to enquire into the Eight Approved Certificate Examinations held in the Summer of 1931*, 1932, p. 14.

[5] Ministry of Education. *Education in 1961* (Cmnd. 1737), p. 18.

[6] Circulars 933, December 1915; 996, May 1917; 1002, June 1917; 1034, March 1918; 1166, July 1920; 1260, May 1922.

[7] Circular 849, 1914.

The School Certificate Examination, following in the tradition of the earlier 'school' examinations carried out by certain examining bodies, was meant to foster in the schools the provision of a good general education. It was this which the Board of Education had been at some pains to promote in Robert Morant's time, and it was to this ideal that the majority of the universities and secondary schools doubtless looked. The contradiction involved in reconciling a policy of promoting a good general education with a refusal to determine the curriculum seemed to have attracted little attention, perhaps because of the high prestige of the universities and all that they represented. Groups of subjects were formed for the First, or School Certificate Examination: for English subjects, for foreign languages, and for science and mathematics. Candidates were expected to show a reasonable attainment in all three groups, at least one pass being required from each group, with a minimum of five passes resulting in the award of a Certificate. Prescribed subjects were thus avoided, and a certain flexibility permitted within the schools. A fourth group was envisaged for art, music, handicraft, housecraft, and similar subjects as early as 1914, but these took some while to emerge because they were not fully developed in all schools.[2] Although no examinations were felt to be possible in these subjects in 1914, the Board made a stronger argument for their inclusion in the following year.[3] The Secondary School Examinations Council agreed to art and music being allowed to count towards a Certificate after 1923, though four of the five necessary subjects had to come from the three main groups.[4] Later there was considerable pressure for 'group four' subjects to be introduced on equal terms for Certificate purposes.[5] This came very largely from headmistresses, for the traditional curriculum of a boys' grammar or public school was not always copied in girls' schools. Two 'group four' subjects were admitted as an experiment in 1928. This extension was confirmed and elaborated in the following year, and most of the examining bodies had accepted the Council's recommendations by 1930.[6] Olive Banks has described in some detail the movement to free the schools from the rigid grip of the examination group requirements.[7] This system only disappeared after the Second World War.

The Secondary School Examinations Council came to assist in promoting the idea of a general education of an academic nature at a critical time. The attitude of the Board of Education, as shown in its Reports for 1912–13 and 1913–14, was beginning to swing back to an acceptance of some vocational education below the age of sixteen. In the former of these Reports the Board announced that it was prepared to allow greater specialization, while in the latter a bias towards rural, industrial or commercial work was suggested.[1] This same attitude was again noticeable in the Board's Memorandum on the Curricula of Schools in 1913.[2] The attitude of the Examinations Council being generally opposed to this, in seeking a general academic form of education, reflected the ideas of the universities and their examining bodies.

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[1] Circular 849.

[2] Ibid.

[3] Circular 933, December 1915.

[4] *Report of the Board of Education for the Year 1923–24* (Cmnd. 2443), p. 81.

[5] Board of Education. *Education in England and Wales, 1926–27* (Cmnd. 3091), p. 29.

[6] Board of Education. *Education in 1930* (Cmnd. 3856), p. 23.

[7] O. L. Banks: *Parity and Prestige in English Secondary Education*, 1955, pp. 85–95.

One of the functions of the new examination system after 1917 was to simplify the matriculation situation, by providing uniform, recognized examinations of a suitable level. Naturally, there was a difference in standard between the School Certificate and the Matriculation Certificate. The School Certificate was intended for average children of a certain age in recognized secondary schools; the Matriculation Certificate issued by some of the universities showed that the holder was of university entrance standard. A higher 'credit' level had to be awarded in each subject to allow the First (or School Certificate) Examination to carry out its secondary function of qualifying people for university entrance and, indeed, for many of the professions.[3] The timing of the examination was largely determined by university entrance, and there was a danger that its true purpose might be obscured, for the examination was primarily intended to test a period of schooling. Ordinary passes were not shown separately on the Certificate at this early stage.

The effect of the credit scheme upon the operation of the School Certificate Examination could be observed officially in 1931, when the Examinations Council appointed a panel of investigators to look into the working of the system.[4] Confidential reports upon the individual examinations had been made in 1918 and 1924, but this was the first opportunity of assessing the operation of the examinations as a whole.[5] By 1931 only the Oxford and Cambridge Joint Board was still conservative enough to insist on less than two subjects from group four. Certain examining bodies required more specific successes for School Certificate purposes. The Northern Board required a pass in English composition; London demanded, in addition to this, a pass in arithmetic or in elementary mathematics, as well as in five other subjects. One credit was required by the Cambridge, the Northern, and the Oxford and Cambridge Joint Boards, and two by the Welsh Board. Bristol asked for a credit from one of groups one, two or three, if one of the five basic subjects came from group four.[6] Credits were thus in use for School Certificate purposes alone, and a further incentive was offered by the possibility of obtaining honours or a distinction. Four bodies awarded honours on the results, and all but two gave distinctions.[7] Thus, the Joint Matriculation Board of the Northern Universities had awarded 'passes with credit', 'goods' and 'distinctions' in separate subjects since 1918, and the subjects passed were themselves marked on the certificates after 1932.[1] The examining bodies tended to perpetuate in this way a competitive spirit somewhat reminiscent of the days in which class lists were published more fully. The demand for credits for matriculation purposes will be shown to have been particularly strong. The Secondary School Examinations Council and the teaching associations exerted a steady pressure to abolish excessive differentiation which resulted in the ending of honours and distinctions in the Cambridge Certificate in 1934, though this was later altered.[2]

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[1] *Reports of the Board of Education for the Year 1912–13* (Cd. 7341), p. 110. *and for the Year 1913–14* (Cd. 7934), pp. 95–96.

[2] Board of Education Circular 826, 1913.

[3] Circular 849.

[4] *The School Certificate Examination*, 1932.

[5] Ibid. p. 5.

[6] Ibid. p. 21.

[7] Ibid.

Philip Hartog, writing in 1918, stated that one of the reasons for which examinations were held was to promote general culture, and doubtless the School Certificate was supported by many who had this in mind.[3] The Second Examination, being designed to assess attainment after two years in the sixth form, was of a more specialized nature. There was to be concentrated study in one of three groups in this Higher School Certificate Examination, together with subsidiary work in topics outside the group. Classics and ancient history formed one group, modern humanistic studies a second, while science and mathematics formed the third. There was a certain amount of choice within each.[4] The Second Examination, like the First, was intended to be a qualifying examination only, and in no sense selective. Entry to the universities and the professions was to depend mainly on the School Certificate Examination at first, but the emphasis was to change over the years and the Higher School Certificate, with its successor, the Advanced level of the General Certificate of Education, was to become more important.

2. MATRICULATION

The University of Oxford, from 1917 onwards, was prepared to exempt from Responsions any candidate holding a School Certificate, providing that he held four credits, one to be in Latin or Greek, and one in another foreign language. It was not necessary to take all of these at the same sitting.[5] The University of London required five School Certificate credits to be gained at once for matriculation: one was to be in English, another in mathematics, and a third in Latin or Greek, or in a science. Matriculation (as admittance to a university was known) was a familiar concept, and its standard was well known to both candidates and employers. The School Certificate, on the other hand, was of relatively recent coinage, and lacked the status of the Matriculation Certificate. Employers would frequently demand a Matriculation rather than a School Certificate, regardless of the actual purpose of the examinations, for matriculation was the mark of a successfully completed grammar school course and a convenient rule of thumb for employers.[6]

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[1] J. A. Petch: op. cit. p. 82.

[2] J. L. Brereton: *The Case for Examinations*, 1944, p. 108.

[3] P. J. Hartog: *Examinations and their Relation to Culture and Efficiency*, 1918, p. 10.

[4] Circular 849.

[5] *The School Certificate Examination*, 1932, p. 46.

[6] J. Wolfenden: 'The Secondary School Examinations Council and the Evolution of Policy on External Examinations,' 1958, pp. 29–30. *External Examinations in Secondary Schools*. G. B. Jeffery (ed.)

Parents, too, pressed head teachers to allow their children to try for 'matriculation subjects' which were really not suited to them. Some pupils, holding the School Certificate, were obliged to mark time for a year when they would have been better advised to specialize, so important was it to them that they attained the matriculation standard.[1] The rigidity of the School Certificate itself as a qualification was demonstrated by the fact that about 30 per cent of those failing did so because of one subject only.[2] The possibility of adding the odd subject at a later date, or of taking Higher School Certificate performance into account, would have eased the situation. Matriculation standards were more rigid still.

4,132 pupils entered the universities from state-aided grammar schools in 1931, yet the London and Northern Boards alone allowed 11,119 to qualify for matriculation.[3] Matriculation requirements were relatively inflexible, particularly at London, and were unsuited to many School Certificate candidates. Examples were available to demonstrate the injustice caused. Thus, a boy with seven credits and a pass in Spanish could not matriculate. His credits included mathematics and three sciences, but he could not register for the examinations of the Institute of Laboratory Technology, for which he was eminently well suited, because matriculation was necessary.[4] Apart from a slight relaxation of the matriculation requirements between 1939 and 1945, they were demanded in full by London University until 1951.

The 1931 investigators had stated that matriculation requirements, because of their rigidity, dominated the school curriculum.[5] The less able children, who were unlikely to enter a university, were being forced to do work that was often unsuitable, and the principle of the examination following the curriculum was set at nought. The investigators declared that universities issuing Matriculation Certificates should cease to do so, claiming that a secondary function had undermined a basic one. They doubted the wisdom of continuing to associate matriculation with the School Certificate Examination under such conditions. They felt that matriculation should be made to depend upon a combination of the Higher and the School Certificates, without specific conditions in the case of the latter.[6]

Five of the examining boards had already made some movements in this direction, but not so the London Board, which continued to demand a rigid basic performance for its highly esteemed Matriculation Certificate. The Northern Board announced in 1935 that it would no longer issue a separate one after 1937. It had already placed some reliance upon the two School Certificate examinations together, and it now leant more heavily still, in an attempt to defeat the great demand by parents and employers for the matriculation qualification.[7] As early as 1918 the Northern Board had given matriculation exemption to persons holding any School Certificate together with any Higher School Certificate. Alternatively a School

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[1] *The School Certificate Examination*, 1932, p. 47.

[2] Ibid. p. 28.

[3] Ibid. pp. 47–48.

[4] University of London General Certificate of Education Subject Reports, Summer 1960; Appendix; Note on the Development of Matriculation Requirements of the University, p. 168.

[5] *The School Certificate Examination*, 1932, p. 50.

[6] Ibid. p. 52.

[7] J. A. Petch: op. cit. pp. 187–95.

Certificate with four credits would be accepted if the candidates had passed in either two principal subjects or three subsidiary subjects of the Higher School Certificate, providing that the subjects came from the matriculation schedule. From 1931 onwards it was also possible to matriculate with a School Certificate having three suitable credits, and four Higher School subsidiary subjects.[1]

Secondary schools found the Northern scheme more satisfactory because candidates were not obliged to mark time in the fifth form if they narrowly missed matriculating on the strength of their School Certificates at the first attempt. There was less reason for saying that matriculation requirements dominated the schools under such conditions. Under the Northern scheme, matriculation was at a level slightly higher than the five credit level of the School Certificate, because a certain aggregate of marks had to be attained.[2]

The Northern Universities Joint Matriculation Board had the advantage of being both an examining body for schools and a matriculating authority. It could therefore plan in the interests of both the schools and the universities that it represented. It was, however, somewhat ahead of its time. Other universities were not obliged to accept its matriculation recommendations, and London remained aloof, mainly because of its external degree students.[3] Many of these left school with a good School Certificate without taking the Higher Certificate; the Matriculation and the School Certificate exemption were retained for their benefit. Interavailability of examinations was not complete, for matriculation requirements differed from place to place. Oxford, Cambridge, Bristol, and Durham, together with the Northern Board, accepted some combination of School and Higher Certificate subjects. In 1938, the Consultative Committee echoed the findings of the 1931 investigators, advocating a separation of the matriculation function from the lower examination.[4] The Northern Board were attempting to make matriculation depend upon a set of passes at the subsidiary level of the Higher Certificate, but they were only partially successful and the War interrupted their plans.[5]

The Examinations Council had meanwhile made some plans of its own to improve the situation. The central Board of Education could only fix School and Higher Certificate conditions, for matriculation standards were not theirs to adjust, though their Examinations Council could make recommendations. In 1938, the Council criticized the preoccupation with a sound basic education because of the rigidity that ensued. The proposed changes were described as a swing of the pendulum from the subject to the pupil.[6] It was stated that, if the examinations were really intended to show the pupil how he had fared in the school course, then a mere pass or fail was inadequate. A graded system, with several degrees of success was what was needed. On the other hand, if the examinations were to serve the purpose of qualifying the candidates to obtain employment, then a pass standard was all that was required. In suggesting compromise, the Council also bore in mind that the subjects to be taken should be suited to the candidates' abilities and aptitudes. A relaxation of the group system was requested in the interests of the pupil, a matter to be developed fully after 1951.

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[1] J. A. Petch: op. cit. p. 191. [2] Ibid. p. 190.

[3] O. L. Banks: *Parity and Prestige in English Secondary Education*, 1955, p. 95.

[4] *Report of the Consultative Committee on Secondary Education*, 1938, p. 353.

[5] J. A. Petch: op. cit. pp. 195–200.

[6] Board of Education. *Education in 1938* (Cmd. 6013), p. 19.

When the Board of Education issued Circular 1463, in 1938, it was announced that a School Certificate would be awarded for a pass in English language and in a minimum of five other subjects from at least two groups, of which group II or group III had to be one.[1] Three grades of pass were to be shown on the Certificates: 'pass', 'credit' or 'very good'. The Board hoped that the new form of the School Certificate would provide employers, university selectors, and others, with all that they required, besides giving greater freedom to the schools and the candidates. The introduction of the three grades is of some interest because several examining bodies had continued to reject the proposal of the 1924 investigators that honours and distinctions should be abolished in the First Examination.[2] Presumably credits and distinctions gave incentives to larger numbers of candidates, and were useful for selection purposes.

Another cause of inflexibility had been righted in 1930, as it then became possible for a state-aided secondary school to receive a central grant when less than a whole form was entered for the First Examination.[3] This condition, which had originally been intended to prevent the entry of only handpicked pupils, too often accentuated the rigidity of the structure in practice, and subjected average boys and girls to examinations which they found excessively difficult. More children, and a larger proportion of weaker ones, were staying on to the age of sixteen at this time, so that the effect was heightened.

The position of the Higher School Certificate Examination was assessed by a panel of investigators in 1939.[4] Its two distinct functions were as apparent as ever, one being its use for college entrance purposes, the other being its use as a final test of sixth-form work. The growing use of the examination for awarding scholarships will be described more fully below and, indeed, matters of selection for actual university entry (as distinct from matriculation or grant awarding) came to a head only in the late 1950s and 1960s.

At least half the Higher School Certificate candidates hoped to enter a university, a training college, or a medical course, in 1937.[5] Others wished to enter the professions directly. It seemed, then, that the examination was carrying out its qualifying function quite effectively, because actual entry frequently depended on the examination. It was recommended, however, that approved special or advanced papers should be set for competitive scholarship purposes. These papers, it was felt, should be set on the same syllabus as the existing papers, except in the case of mathematics and modern languages, but the questions should be more testing.[6] The

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[1] Board of Education. *Education in 1938* (Cmd. 6013), p. 20.

[2] Board of Education. *Education in England and Wales in 1925–26* (Cmd. 2866), p. 51.

[3] Board of Education. *Education in 1930* (Cmd. 3856), p. 22.

[4] *The Higher School Certificate Examination, being the Report of the Panel of Investigators appointed by the Secondary School Examinations Council to enquire into the Eight Approved Higher School Certificate Examinations held in the Summer of 1937;* 1939.

[5] Ibid. p. 6.

[6] Ibid. p. 57.

Northern Joint Board had already set additional papers in 1938 for scholarship candidates.[1] One of the reasons for having the same syllabus for two different types of paper was that few of the smaller schools could afford to organize their sixth forms at two distinct levels.[2]

The other function, that of testing sixth-form work, was not being executed quite so effectively because of the increased numbers staying beyond the age of sixteen. The full Higher School Certificate was too advanced for many of these, a fact which had been noted in 1926, when a previous investigation had been made.[3] The need to develop subsidiary subject papers at a level between School and Higher Certificate was appreciated from the beginning, and one of their uses was to cater for the less capable pupils. Roughly speaking, 'subsidiary' papers were taken at a level one year beyond that of the School Certificate.

Subsidiary subjects were of long standing, for they were mentioned in Circular 849 of 1914. They were only discontinued in 1951, when the whole scheme of things was altered. It was impossible to obtain a Higher School Certificate upon subsidiary subjects alone, but 'letters of success' might be granted in specific subjects.[4] The papers were used by those leaving after one year in the sixth form, as well as by those taking a full Higher Certificate course. They were used by State or County Scholarship contestants to bolster their chances, and also by sixth formers in mid-course, to try their wings.[5] It has already been pointed out that the papers were used for matriculation purposes in certain quarters.

London University examinations were exceptionally important in helping the growth of university colleges scattered over the country. The external degree system enabled the university colleges to grow into universities at home as well as abroad. Opportunity was also extended to the able young people who could not go to college. If the 'London Matric' was in great demand between the wars, it was not because of entry to London University alone, nor because of the employers' demands. The relation between the London Matriculation and the School Certificate Examination was paralleled by that between the London Intermediate Examination and the Higher School Certificate. The 'Inter' was basically part of the degree course, though it could even be taken by schoolboys, as part of London's external degree policy. Exemption might be given on the strength of a London Higher School Certificate, but other certificates were not interchangeable until 1938.[6] 'Inter Exemption' was demanded from certain entrants to the Colonial Civil Service, banks, the armed forces, and local authorities, in the same way that 'Matric' was expected at a lower level. The Higher School Certificate finally drifted apart from the Intermediate Examination; the latter became outdated and was virtually abolished by 1955. 'Inter' came from the days when it was possible to matriculate at sixteen and be a graduate at twenty, a not unusual affair in 1900. It determined the stage of entry to the degree course, and was thus transmogrified into 'faculty requirements' in a later age.

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[1] *The Higher School Certificate*, p. 6.

[2] J. A. Petch: op. cit. p. 114.

[3] Board of Education. *Education in England and Wales, 1926–27* (Cmd. 3091), p. 29.

[4] J. A. Petch: op. cit. p. 109, Note 6.

[5] Ibid. pp. 106–9.

[6] University of London General Certificate of Education Subject Reports, Summer 1960, pp. 167–70.

3. THE NORWOOD REPORT

A committee of the Examinations Council sat between 1941 and 1943 to consider not only the examinations but also the curriculum of the secondary schools. It was appointed by the President of the Board of Education, and not by the Council. The document it produced was known as the Norwood Report, and contained many ideals for peacetime use. Radical suggestions were made for the future of secondary school examinations.

First, it was hoped to set up a 'subject' examination, so that each candidate would receive a certificate upon which his performance would be recorded in each subject. Groupings were to be unnecessary, though employers and colleges might naturally continue to demand the special conditions that they desired. The possession of a certificate was no longer to guarantee the possession of a sound general education. This was now ensured by inspection both in independent and aided schools, whereas university influence, and the use of their examinations in particular, had been needed in 1917.[1] The Norwood Committee suggested that an account of each candidate's school record should be added to his certificate, so that responsibility would be thrown to the schools.[2] It was felt that grades, ranging from 'excellent' to 'weak', should be shown for each subject, though it was not intended that a competitive situation should be established. The external examination was to be arranged with the help of the existing examining bodies, and was to be conducted by standing committees in which teachers were to play a much larger part than they did at the time.[3] Indeed, this was only meant to be a transitional stage, for it was hoped that the whole business of examining at 16+ should become an internal matter after seven years.

The assessment of a sound general education, therefore, was ultimately to be left to the teachers themselves; external examinations were finally to wither away, leaving the teachers in fuller control of their own institutions. Such were the wartime plans for a world at peace. The subject examinations were to materialize eventually, but internal examinations did not become popular, whether for reasons of inertia, conservatism or lack of faith in the teachers. The practical difficulties envisaged in assessing the abilities of candidates from the smaller, or less well-known schools, when they applied for work or for college entrance may have been a contributory factor.

It was hoped to cater for university and college entrance qualification by an examination for young people of eighteen.[4] This was expected to replace the current

[1] University of London G.C.E. Subject Reports, Summer 1960, p. 172.

[2] *Curriculum and Examinations in Secondary Schools. Report of the Committee of the Secondary School Examinations Council appointed by the President of the Board of Education in 1941*; 1943, pp. 47–48. [3] Ibid. p. 46.

[4] Ibid. pp. 41–43.

'principal subject' in the Higher School Certificate Examination. The numbers of sixth-form candidates had doubled between 1924 and 1936, and it was largely in anticipation of this trend continuing that the plans were made.[1] It was felt that pupils should normally take this School Leaving Examination in a limited number of subjects only.

Competitive purposes were not to be served by this examination. University scholarships and Civil Service entrance were to have their own tests according to the Norwood Committee. The Leaving Examination was to qualify persons for entry, not to select them. The need for it to be externally administered nevertheless remained.[2]

4. THE GENERAL CERTIFICATE OF EDUCATION AND UNIVERSITY ENTRANCE

When the Consultative Committee reported on secondary education in 1938, the dual functions of the Higher and the School Certificates were pointed out.[3] The latter tested the first stage of a grammar school education, and was used for matriculation purposes. The other tested the sixth-form course and also served for entrance and scholarship purposes to the universities and professions. Less emphasis was placed upon the idea of their testing the school course by the Secondary School Examinations Council in 1947; indeed, it was felt that more weight should be given to the results of systematic internal examining and to the use of objective testing.[4] The influence of the 1943 Norwood Report had lasted this far.[5] The Examinations Council underlined the forward-looking aspect of the examinations, as showing fitness for an extended education. It was thought that external examinations were proper for competitive purposes, for scholarships and awards at the universities, and also for certain qualifying purposes, to enable those leaving school to establish competence in specific subjects, or to secure exemption from university or professional examinations.[6] One of the original functions, that of testing a completed school course, should be left to the schools.

A new system of certificates was thus felt to be necessary in 1947. It was proposed that, initially at least, a General Certificate of Education at Ordinary level should be awarded at about the credit level of the old School Certificate Examination: this was to be of use both in determining fitness for a sixth-form course or for further or professional education, and for non-specialist sixth-form purposes. Advanced level papers were generally to be taken two years later, at the end of the sixth-form course, and were to be more specialized, being similar to the Higher Certificate principal subject papers in standard. Both the Ordinary and the Advanced level examinations were meant to be essentially qualifying rather than competitive. Standards on the whole were to be raised. The old School Certificate level was to be abolished, and the examination established only for pupils of sixteen or above. Additional, scholarship, papers were to be made available for State Scholarship purposes, being competitive in operation.

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[1] *Report of the Consultative Committee on Secondary Education*, 1938, p. 100.

[2] *Curriculum and Examinations in Secondary Schools*, 1943, pp. 43–44.

[3] *Report of the Consultative Committee*, 1938, p. 258.

[4] *Report of the Secondary School Examinations Council. Examinations in Secondary Schools*, 1947, pp. 4–5.

[5] *Curriculum and Examinations in Secondary Schools*, 1943, p. 45.

[6] Ibid. p. 5.

At the same time that the standards were raised, the group requirements were to be drastically freed. Certificates were to be marked with details of passes so that it would even be possible to have one bare pass registered.[1] The scheme had the advantage of flexibility over the existing system. The Consultative Committee had advocated the loosening of group requirements in 1938, but the 1947 Report carried the matter much further.[2] The School or Matriculation Certificate, as a mark of a good general education, was to be no more: the college or the employer could assess a pupil's worth by glancing at his Certificate, upon which the quality and quantity of his attainment would be visible. The quantity would be the more easily seen, for there was to be but one grade of pass at each level; there was to be a strong resistance to changing the number of degrees of pass on the part of the Ministry.[3] It was felt that several grades of pass might endanger the significance of the normal pass standards. For a qualifying examination this was reasonable enough, though the system was later to break down at Advanced level under the stress of competition for university entrance, and different grades of pass were to be introduced.

Many teachers welcomed the freedom given them by the proposed subject examinations, but they remained strongly in favour of some external assessment of their pupils at 16+.[4] By removing group restrictions the Examinations Council, in the best Norwood traditions, was attempting to throw the responsibility of education on to the shoulders of the teachers themselves though neglecting to reorganize the examining bodies. Sections on school records, objective tests and internal examinations occupied the first five pages of the eight-page 1947 Report. The teachers tended to resist such changes, though whether from conservative inertia or canny realism remains a matter of opinion. One of the reasons, however, was doubtless the fear of decreased liberty in the schools: external examinations might be replaced by a much firmer form of organization, involving detailed cooperation with the local or central authorities.[5]

The first General Certificate of Education examination was held in 1951, and it was quickly followed by the Second Report of the postwar Examinations Council.[6] Already, the Council recommended that distinction endorsements be placed upon Advanced level Certificates, to reward a good performance and to be of use for selection purposes. The Minister agreed immediately.[1] A more controversial recommendation in the same Report was to provide a loophole for the admission of younger children to the Ordinary level examination. Head teachers were given discretion to allow those under the age of sixteen to enter, so long as this was educationally sound and the children had covered the course. It had previously been the intention to allow intelligent children to bypass Ordinary level if they had to be hurried on.

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[1] *Examinations in Secondary Schools*, 1947, p. 6.

[2] *Report of the Consultative Committee*, 1938, pp. 261–65.

[3] Ministry of Education Circular 256, September 1952.

[4] *The Times Educational Supplement*, 13 July 1946, p. 330: 'A Statement of the Joint Committee of the Four Secondary School Associations.'

[5] Ibid.

[6] *Examinations in Secondary Schools. The Second Report of the Secondary School Examinations Council*, 1952.

Whatever uses the General Certificate of Education was designed to serve, it came to possess considerable importance at Advanced level for university and college entry. The Ordinary level Certificate gave information about a candidate's general education, remaining a qualifying examination with one official pass level; specialist knowledge was tested at the Advanced level. R. A. C. Oliver, Professor of Education at Manchester University, has shown that whereas the universities once had more places than applicants, and were content to admit students with a sound basic education but without specialist knowledge, this latter came to be demanded after the Second World War.[2] Sixth forms grew, and universities began to select from among those who had completed a first year's university work at school. The sixth-form rather than the fifth-form examinations then provided the criteria for selection, with all the advantages of deferring selection until a later age. The demand for a higher education grew, as grants became available and as parents began to appreciate the benefits of a university course.

The universities were, as independent bodies, free to select entrants as they wished under the new arrangements. The Ministry had somewhat overwhelmed schools and examining bodies when introducing the new examinations, by virtually banishing the latter from its Examinations Council and by saddling the schools with an unwanted age restriction.[3] The universities came together in 1949 to produce what was known as the 'Mountford Concordat', when a conference of university representatives was called by the Committee of Vice-Chancellors and Principals.[4] Besides putting firmly to one side any suggestion that qualification should rely solely on school reports, and thus thwarting the disciples of Norwood, the meeting defined matriculation requirements in greater detail.[5] Four or five General Certificate passes were required in addition to a pass in English language, and two of them were to be at Advanced level. The subjects had to include mathematics (or an approved science), and a language other than English. Candidates offering only four subjects were required to pass in one Ordinary and two Advanced level subjects at the same time. The meeting appeared to have consulted neither the schools nor the Ministry in coming to this decision, which was soon approved by most of the universities individually.

These were only the minimum requirements. Certain 'faculty conditions' were also laid down at London University, though they were not very testing. Thus, engineering students, not unnaturally, were expected to have passed at Ordinary level in mathematics. More difficult were the Intermediate Exemption qualifications for direct entry to the final course. These involved Advanced level subjects and were very similar to the old Higher School Certificate principal subject requirements for 'Inter Exemption'.[1] Thus economics students were expected to have three Advanced level passes, while specific passes in mathematics, physics and chemistry were demanded of engineering candidates. Similar arrangements were common in other universities, yielding a rather complicated situation for applicants.

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[1] Ministry of Education Circular 251, 28 April 1952.

[2] R. A. C. Oliver: *The Effectiveness of General Certificate of Education Advanced Level as a Criterion for Selection*, 1960, p. 1.

[3] Ministry of Education Circular 113, 26 June 1946.

[4] University of London G.C.E. Subject Reports, Summer 1960, p. 170.

[5] *The Times Educational Supplement*, 15 January 1949, p. 35, 'The New Examination'.

After a sub-committee of the Committee of Vice-Chancellors and Principals reported in June 1955, the number of subjects to be passed simultaneously was lowered. Faculty boards in the universities were asked to frame their own particular requirements accordingly, but response was not rapid.[2] Oxford and Cambridge did not join in these arrangements: Responsions and Previous Examination exemption continued to be granted on Ordinary level performance, though the colleges usually demanded a much higher specialist knowledge from candidates.[3]

The schools were at first embarrassed by the proposals, some voices stating that it would be the end of general education, others that the demands were excessive.[4] The difference of opinion rested largely on whether general studies should be examined, and whether general education could be left to the schools alone. The examining boards were not consulted by the universities about this.[5] The new matriculation was heavily criticized as lowering the standards of entry.[6] It was felt that entry might be the reward of cramming, as different subjects could be taken at different times. In practice, standards rose sharply with the demand for places, and with the high postwar birthrate. It had been the habit of certain university departments to ask for qualifications above the minimum since the turn of the century.[7] This custom spread rapidly, and it will be shown how the use of gradings or of actual marks by the universities came to exaggerate the competitive aspect. Dr John Lockwood, the Principal of Birkbeck College and Chairman of the Secondary School Examinations Council, described the situation as the 'battle for the cream' when speaking at a conference in 1959, for university departments also struggled to attract the ablest.[8]

The Advanced level certificates, being intended to indicate a qualifying standard, did not show more than a pass or distinction before 1963. Performance in the scholarship papers was only noted for State Scholarship purposes. Marks or gradings were, however, available to the head teachers, who were generally permitted to let parents, pupils and teachers know the Ordinary and Advanced level performances.[1] Certain information was given about scholarship results, but the marks themselves were withheld. It was customary to send scholarship paper details to local education authorities for grant awarding purposes, and these were also used unofficially for selecting university entrants.[2] Some examining bodies, at least, went out of their way to make information available to university selectors about Advanced level marks, after 1960.[3]

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[1] University of London G.C.E. Subject Reports, Summer 1960, p. 171

[2] Ibid. p. 172.

[3] *Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom. Report of a Sub-Committee on University Entrance Requirements*, 1955, pp. 7–8.

[4] *The Times Educational Supplement*, 5 February 1949, pp. 88 and 89.

[5] J. A. Petch: op. cit. p. 201.

[6] Ibid. pp. 203–4.

[7] Ibid. p. 183.

[8] *The Times Educational Supplement*, 3 July 1959, p. 15.

It was suggested that grades should be awarded formally to help the examination carry out the competitive function that had been thrust upon it.[4] An alternative was for the universities to set their own entrance papers for selection purposes. They had already condemned such a method in 1958, because it would tend to increase the number of examinations, though they made an exception in the case of open scholarship examinations.[5] Seven, or possibly nine grades were proposed, following the example already set unofficially by the Cambridge Examinations Syndicate; certainly more than just fail, pass or distinction were needed.[6] Standardized marks as well as grades had become fashionable also, though their detailed discrimination was less reliable than the wider range of marks implied. It was stated in 1961 that it was the practice to accept candidates for entry to honours courses with two Advanced level passes averaging 60 per cent, or with three averaging 50 per cent. Marks below these were usually felt to show unsuitability for an honours, though not necessarily for a general, degree course.[7]

Examining bodies already operated a scheme of grading Advanced level results: they had worked it out with the local authorities to help in awarding grants, though it was not formally recognized by the Secondary School Examinations Council.[8] It only remained, therefore, for the Council to give its blessing to an existing scheme, thereby creating a virtue out of a necessity; the grades were shown upon the certificates from 1963 onwards.[9]

The Examinations Council observed that pressure on the grammar school sixth forms to achieve high grades was so intense that the curriculum was becoming dangerously overloaded. Specialization was carried to extremes, and the university entrance and scholarship examinations worsened the situation.[1] Popular university departments could raise their entrance standards to the heights. The schools felt the stress of competition in what was intended to be a qualifying examination. Their syllabuses became crowded, especially in scientific subjects, and there was every incentive for cramming and mark-grubbing. Scholarship papers, which were only designed to discriminate between the ablest State Scholarship candidates, came to be used at a lower level, for university entrance, where they were relatively unreliable.[2] When all the accent was upon competition there was some difficulty in catering for the non-university sixth former who really needed a simpler qualifying examination.

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[1] University of London Regulations for the General Certificate of Education Examination, Summer 1960 and January 1961; 1958, p. 3.

[2] *The General Certificate of Education and Sixth Form Studies: The Third Report of the Secondary School Examinations Council*, 1960, p. 8.

[3] University of Cambridge Local Examinations Syndicate. One Hundred and Second Report to the University, 1960, pp. 1–5.

[4] R. A. C. Oliver: op. cit. p. 13.

[5] *The Committee of Vice-Chancellors and Principals. Report of an Ad Hoc Committee on Procedure for the Admission of Students*, 1958, p. 8.

[6] R. A. C. Oliver: op. cit. p. 6.

[7] Association of University Teachers. *Submission to the Committee on Higher Education*, 1961, p. 6.

[8] *The General Certificate of Education and Sixth Form Studies*, 1960, p. 8 and Appendix E.

[9] London University Regulations and Syllabuses for the General Certificate of Education Examinations, Summer 1963 and January 1964, p. 7.

The 1959 Report of the Central Advisory Council had made it quite plain that Oxford and Cambridge entrance requirements were a major factor in increasing the competition in the sixth forms.[3] Entrance from the maintained schools to Oxford and Cambridge was difficult without passing a special scholarship examination, generally taken at Christmas in a sixth former's third year. Commoners as well as scholars came to be selected by the same examination in many cases.[4] London University was in almost as great a demand, because college departments had gained good reputations. Even one of the lesser-known London colleges could demand a State Scholarship as a condition of entry in mathematics.[5] Certain university departments aggravated the situation by requiring such high grades at Advanced level that it proved impossible to recruit enough students.[6]

The Advisory Council could see a distinct danger of the number of examinations multiplying for university entrance. The college, faculty, or department not infrequently set entrance examinations themselves, and university scholarship examinations carried out similar functions.[7] Selection in 1959 was, however, generally by interview, with examination marks being taken into account.[8] A 'firm' or a 'provisional' offer of a place might be made, or the candidate might be put on the waiting-list if he was not rejected at once. With the customary dress-rehearsal of the external examinations in the fifth term, these various procedures seriously limited the amount of time available for actual sixth-form teaching.[9] Nevertheless, the Advisory Council favoured some form of selection machinery operated by the universities and held in common, for the introduction of yet another 'level' above Advanced level was feared.[10]

It was for the Examinations Council to look into the ways and means of easing selection difficulties. Various reforms were considered. One was to introduce a new 'U' level at a stage above Advanced level, to test potential honours degree entrants

[1] *The General Certificate of Education and Sixth Form Studies*, p. 2.

[2] Ibid. p. 3.

[3] *The Report of the Central Advisory Council for Education*, Vol. 1, 1959, pp. 283–87.

[4] Cheshunt Grammar School Records: 1962.

[5] Ibid. 1962.

[6] *The Times Educational Supplement*, 11 October 1963, p. 497.

[7] *The Report of the Central Advisory Council for Education*, Vol. 1. 1959, pp. 291–93.

[8] Ibid. pp. 293–94.

[9] Ibid. p. 288.

[10] Ibid. p. 298.

to the universities.[1] The possibility of a consequent down-grading of the Advanced level was one of the disadvantages of this, and another was the likely need for a major reorganization of the examination system. The Examinations Council decided to turn an expedient into a principle, and to adjust the existing system. A method of grading Advanced level marks was therefore proposed, not dissimilar to the less formal one which already existed. There were to be five grades of pass, ranging from A to E, and the first two were to indicate suitability for an honours degree course.[2] To assist university selection further, 'supplementary gradings' were to be awarded on 'Special' papers – 'S' papers, like the existing 'Scholarship' papers.[3] 'Distinctions' or 'merits' were to be awarded to those candidates with an A, B or C in their Advanced level papers who did sufficiently well in their Special papers. It was intended that these papers should be set on the Advanced level syllabuses but with more searching questions, and that about fifteen per cent of the Advanced level candidates should score in the more difficult tests.[4] The universities wanted more grades than the five proposed by the Council, but otherwise found the Report much to their liking.[5] Numerical Advanced level grades of the Cambridge Syndicate, and of the University of London, were steadily brought into line in the early 1960s.[6]

The Council justified its proposals by describing the new procedure as a qualitative rather than a competitive test.[7] It was intended to assess standards of excellence, not to discriminate between rivals. The real effect of the Council's deliberations was to try to make the existing situation more respectable by removing some of its worse byproducts.

It had previously been customary to take scholarship papers in two subjects, and now this was generally to be reduced to one.[8] Additional syllabuses had formerly been set for the Scholarship papers, but the new Special papers were to be based on those for the Advanced level. The demand for university places was such that candidates had been forced to specialize excessively. Basic matriculation requirements, of course, pinned down the university entrants slightly, but did not ensure a continued general education. It was quite possible for a pupil to specialize in science for three years in the sixth form to the exclusion of all else, and few classicists had the opportunity of studying science as they worked for their open scholarships. The gap between the 'two cultures' of C. P. Snow's works was apparent in the sixth form, and it was largely because of this that demands arose for a better-balanced curriculum.[9]

It became customary for the great majority of grammar school children to stay for the sixth-form course in many areas of the country by the 1960s. In some parts it was becoming usual for large numbers of former secondary modern school pupils to enter the grammar schools at this stage.[1] Whereas the School Certificate had once guaranteed a general education, and tradition had associated the sixth form with university entry, now many pupils were entering with as few as two or three Ordinary level passes. Many intended solely to widen their range of passes, and not to sit for Advanced level at the end of their course. A balanced, general education was as necessary for these persons as it was for the potential university entrants, and the introduction of an examination at a level between the Ordinary and the Advanced was the third possibility of reform considered by the Examinations Council between 1957 and 1960. The idea was rejected because it would have led to an even more complicated examination system than the one that already existed.[2] A balanced curriculum and a good general education were being sought both for less academic children and for university specialists.

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[1] *The General Certificate of Education and Sixth Form Studies*, 1960, pp. 5–7.

[2] Ibid. p. 8 and Appendix F.

[3] Ibid. pp. 8–10.

[4] Ibid. p. 10.

[5] Ministry of Education. *Education in 1961* (Cmnd. 1737), p. 15.

[6] University of Cambridge Local Examinations Syndicate. One Hundred and Second Annual Report to the University, 26 May 1960, p. 1; and Regulations, 1960–64.

[7] *The General Certificate of Education and Sixth Form Studies*, p. 11.

[8] Ibid. p. 10.

[9] C. P. Snow: *The Two Cultures and the Scientific Revolution*. Rede Lecture, 1959.

The Minister of Education fully backed up the Examinations Council's scheme in 1961.[3] Only one modification was made: that the universities should be allowed to know about candidates taking Special papers who failed to achieve a distinction or a merit grading.[4] It had already been announced that State Scholarships would cease from 1963 onwards.[5]

The wasteful business of applying to several universities was finally to be overcome by a clearing-house system. There were no less than 2,500 unfilled places in the British universities in 1955, partly because of inefficient entry methods.[6] At the same time, similar numbers of applicants were formally qualified but not selected. The situation was worsening, and would-be entrants found themselves having to apply to half-a-dozen universities or more, to be sure of a university education; this was a time-consuming procedure for all concerned.[7]

Some of the more popular university departments, mainly the scientific ones, grouped together informally to help applicants by 1960. When the normal selection period came to an end, for example, universities were to notify Dr N. Thomson of the University of Bristol Physics Department of any vacancies for physicists. The universities were then to tell any disappointed candidates of the alternative universities at which places were still available, having received this information from the agency.[8] After the middle of September, candidates might contact the agency directly. The scheme was arranged with the blessing of the Committee of Vice-Chancellors and Principals, and in physics at least, it applied to Diploma in Technology candidates in colleges of advanced technology as well as to university applicants.[9]

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[1] Cheshunt Grammar School Records: Sixth-Form Entrants.

[2] *The General Certificate of Education and Sixth Form Studies*, p. 1 and Appendix D.

[3] Ministry of Education Circular 9/61, 12 May 1961, p. 2.

[4] Ministry of Education. Administrative Memorandum 3/61, 8 February 1961.

[5] Ministry of Education. *Education in 1961* (Cmnd. 1737), p. 16.

[6] *The Report of the Central Advisory Council*, 1959, p. 285.

[7] *The Times Educational Supplement*, 27 April 1962, p. 817; 'Comment in Brief'.

[8] *The Times Educational Supplement*, 21 July 1961, p. 88.

[9] *The Times Educational Supplement*, 27 July 1962, p. 113.

A larger scheme than this, involving a central office, was to come into operation for admissions in October 1964. A year's 'running in' was arranged so that a partial scheme could be effective for October 1963.[1] All applications were to go through a central office except those for Oxford and Cambridge colleges, dental and medical schools of London University, the Queen's University of Belfast, and Aberdeen, Glasgow and St Andrew's Universities. In general, four choices were to be given in order of preference, and a drastic lightening of clerical work and interviewing was anticipated. As before, the alternatives were an unconditional offer, an offer of a place conditional upon certain entrance requirements or General Certificate of Education standards, a place on the waiting list, or an outright rejection.[2] The applications to second-, third- and fourth-choice universities were then made automatically.

The Universities Central Council on Admissions, or U.C.C.A., as this central organization came to be known, issued its first report in 1964. The number of unfilled university places at the end of operations in October 1963 was claimed to be 1,030, as opposed to about 2,500 in 1955.[3] There were still, certainly, a great many more applications than there were places. Supply and demand varied considerably from department to department but, despite excessive competition for entry, there were several hundred vacant places in pure science and technology.[4] In mathematics, for example, this situation was caused by university departments demanding the very highest Advanced level grades from applicants. Faced with an unparalleled demand for mathematicians (and especially for teachers) the university departments could deafen their consciences by trumpeting about high standards. Constructive attempts to provide more appropriate mathematics courses for those many qualified students not intending to go on to research were conspicuously few.

In a survey sample which covered all subjects, almost half of the applicants were rejected by the universities.[5] Nearly one-quarter of these had insufficient Advanced level passes, and others may have lacked supporting qualifications. The bulk of those turned away (although qualified for a university place) appeared to be continuing their education at school or at a technical or teachers' training college.[6] It was nevertheless clear that the universities were operating, as it were, in a seller's market. The relative shortage of university places meant that the price for entry was kept high. It was the schools which felt the pinch, with a resulting curriculum distorting demand for high grades in the specialist subjects.

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[1] *The Times Educational Supplement*, 27 April 1962, p. 836.

[2] *The Committee of Vice-Chancellors and Principals. Report of an Ad Hoc Committee on Procedure for the Admission of Students*, 1958, p. 9.

[3] The Universities Central Council on Admissions. First Report, 1961–63, 1964, p. 7, Table 7.

[4] Ibid. p. 17, Appendix A.

[5] Ibid. p. 9, Table 9.

[6] Ibid. p. 13, Table 12.

5. ASSISTANCE TO UNIVERSITY STUDENTS

It was not difficult for the average student from a wealthy family to gain entrance to Oxford or Cambridge at the end of the nineteenth century. One condition that tended to eliminate other than public schoolboys was the necessity of passing Greek in Responsions or in the Previous Examination. There was not that competition for places that existed in later years, and only the abler undergraduates were keenly concerned with a high class of honours at the end of the course. The boy who had not learned Greek from an early age, or who had specialized in subjects other than the classics, was handicapped, and so the local secondary school pupils found some difficulty in entering the ancient universities.[1]

The difficulties of gaining admission were partly financial as well. In 1909 more than half the scholarships and exhibitions at Oxford were in classics, and so the able boy from the wrong school had little help from the university funds, and very little from his local education authority.[2]

Scholarships and exhibitions were usually closed before 1850. That is to say, they were confined to boys from specified schools or districts, or to founders' kin. The traditions had remained essentially medieval until the Royal Commissions began their work on the universities in the middle of the century. The competitive principle behind the honours schools has already been described, and the Commissioners extended it at both universities in the 1850s. Closed scholarships were ended, and the funds redistributed upon a competitive basis. It was proposed that there should be five hundred open scholarships of £50 each at Oxford, for example.[3] Later, Benjamin Jowett also called for awards worth no less than £80 annually, and each being tenable for four or five years, and this view was taken by the 1874–77 Commissioners.[4] The number of classics scholarships was felt to be sufficient, but more were required in science, mathematics, medicine and Hebrew.

Generally speaking, exhibitions were in those days intended to relieve financial cares, while open scholarships were available to all classes. This distinction was made until 1909, though it lapsed later.[5] There was, then, a confusion of function between the two methods. The money could either be used to stimulate performance by rewarding merit with honour, or it could be used to assist poor students. Criticisms of the system were that it did not give enough aid to the really needy, that it favoured public schoolboys, that it promoted an unhealthy rivalry among schools, and that it resulted in a disjointed entry standard because there was no uniform university policy over the scholarships. The endowments were in the hands of the colleges and not of the universities.[6]

Addiction to the merits of stark intellectual competition led to the creation of prize fellowships. Jowett had approved the idea, and the Oxford Commission of 1877–82 had arranged for a number of these fellowships to be awarded as prizes. Successful candidates, having taken an examination, were given £200 a year for seven years. Their personal income had to be limited to £500 a year, and one probationary year had to be spent in college but, apart from these conditions, intellectual proficiency was handsomely rewarded.[1] Prize fellowships became less popular later, because, as absentees, too many of the fortunate holders contributed little to the universities. Open scholarship competition, however, remained as popular as ever in certain circles, and schoolmasters continued to follow the 'scholarship stakes' keenly in the 1950s and 1960s, as the successes of their prize pupils were rewarded with honour rather than cash.[2] The value of a scholarship or exhibition in 1963 was of the order of £60 or £40, but assured entrance was one of the main advantages of these awards.[3]

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[1] Lord Curzon of Kedleston: *Principles and Methods of University Reform*, 1909, pp. 101–3.

[2] Ibid. p. 77.

[3] *Report of Her Majesty's Commissioners appointed to enquire into the State, Discipline, Studies and Revenues of the University of Oxford*, 1852, p. 175.

[4] Universities of Oxford and Cambridge Act 1877 (Oxford). Thirty-six Statutes made by the University of Oxford Commissioners, 1882, pp. 17 ff.

[5] Lord Curzon of Kedleston: op. cit. p. 76.

[6] Ibid. pp. 82–84.

Open scholarships at the other universities were few and far between, for only Oxford and Cambridge possessed the endowments that were necessary. The nineteenth century concept of a 'ladder of learning' stretching from the board school to the university, an idea supported by Thomas Huxley and others, required some form of financial assistance for the poorer students.[4] As new universities and university colleges grew up in the course of the nineteenth and twentieth centuries, so a great opportunity was made available to such people, for they could frequently manage to live at home, supported, if necessary, by a small public grant. Local authorities came to give grants for this purpose under the 1902 Education Act.[5]

When the Board of Education issued a statement of the central grants available to undergraduates in 1911, 1,400 scholarships to universities or colleges were being maintained at an average value of £43.[6] A limited number of central awards were being made in the traditions of the Science and Art Department.[7]

State aid to students increased steadily after 1911. It was then that the Board of Education began to assist a four-year course of training for teaching, at the universities.[8] The Board paid the tuition fees, and a small amount for supervision. Those living in hostels received between £25 and £35 annually, while those residing at home received less.[9] In 1944, the McNair Committee finally voted that the system of forcing young students to sign a declaration which committed them to teaching should cease, and Ministry of Education assistance to university students training as teachers soon became limited to those in the one-year post-graduate course.[10]

[1] Lord Curzon of Kedleston: op. cit. p. 94.

[2] *The Times Educational Supplement*, 24 July 1959, p. 99.

[3] *The Times*, 24 December 1962, p. 5.

[4] C. Bibby: *T. H. Huxley, Scientist, Humanist and Educator*, 1959, pp. 180–81.

[5] Education Act 1902, Section 2.

[6] *University Awards; the Report of a Working Party on University Awards*, 1948, p. 3.

[7] *Report of the Board of Education for the Year 1911–12* (Cd. 6707), 1913, pp. 134–36.

[8] Board of Education. *Statement of Grants available from the Board of Education in aid of Technological and Professional Work in Universities in England and Wales* (Cd. 6270), 1912.

[9] Ibid. p. 5.

[10] *Teachers and Youth Leaders; Report of the Committee appointed by the Board of Education to consider the Supply, Recruitment and Training of Teachers and Youth Leaders*, 1944, pp. 90–92.

Direct central aid to stimulate competition in the secondary schools was made possible in 1920. State Scholarships were initiated, to be awarded upon the results of the Higher School Certificate Examinations. 200 were given at first, to cover tuition fees, with up to an £80 limit for maintenance.[1] The 1922 Committee on National Expenditure suspended the scholarships for two years, but 300 were offered in 1930, and 360 in 1936, in which year they were thrown open to all secondary schools in England and Wales, and not just to the state-aided ones.[2] Maintenance grants were by now up to £100. Whereas, in 1910, 977 pupils entered the universities from grant-aided secondary schools, there were 4,560 in 1932, and the number of local authority awards alone soon exceeded 1,500.[3] Even so, for every seven fee-paying secondary school pupils going on to higher education in the 1930s there was only one free pupil, and the disparities in opportunity between social classes were very apparent.[4] About two per cent of the population reached the universities in 1946, but as many as five per cent showed tested intelligence as great as that of the upper half of these fortunate students, demonstrating that the most was not being made of the national reserves of intellectual ability.[5] One of the reasons was the comparatively small number of grants for higher education.

A relatively generous approach was, in fact, made to the problem of financial assistance for university students during the Second World War and afterwards. The attitude of such official documents as the 1943 White Paper on Educational Reconstruction was liberal, and the Norwood Committee's Report of 1943 specified what was needed in somewhat greater detail.[6] Existing grants to students were said to be inadequate, being unevenly distributed over the country. It was more difficult to obtain a grant in one area than in another, either because of varying local demand or because some local authorities lacked resources. One area would award a grant to anyone with a Higher School Certificate, while elsewhere the situation was more competitive. The diverse means of receiving aid, whether by university, central or local authority scholarships, or by private or school-leaving exhibitions, was stated to have led to a scramble which was quite unreasonable.[7] The Norwood Committee's proposals were intended to weld together the uniformity of provision made possible by central aid with the more personal approach stated to stem from a local authority scheme.

Two sorts of papers were therefore envisaged by the Norwood Committee for pupils at the age of 18 +. The qualifying examination has already been described, as giving evidence of ability to carry on with further education at university or professional level. A competitive examination, with more difficult questions and on no detailed syllabus, was to cater for the abler candidates, and to be of use in selecting them for university grants.[8] The university examining bodies were to set the papers, as they did already, but boards composed of teachers and university and local authority representatives were to take school records and other relevant information into account when classifying successful candidates. The most promising of these were to receive awards directly from the State, while others might receive local grants, half of the cost of which was to be defrayed by the State. Those local authorities giving loans rather than grants were discouraged.[1]

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[1] *University Awards*, 1948, p. 3. [2] Ibid. p. 4. [3] Ibid.

[4] J. L. Gray and P. Moshinsky: 'Ability and Opportunity in English Education', *The Sociological Review*, April 1935, XXVII No. 2, p. 160.

[5] *Scientific Manpower. Report of a Committee Appointed by the Lord President of the Council* (Cmd. 6824), 1946, p. 9.

[6] *Curriculum and Examinations in Secondary Schools*, 1943. [7] Ibid. p. 38.

[8] Ibid. pp. 39–42.

The success of the Further Education and Training Scheme was another factor in improving grants to students, and in rendering a university education more accessible. This scheme was designed to finance the rehabilitation of ex-soldiers, first of those invalided out of the Services after 1943, and later of all those young men and women who returned from the wars to continue their studies.[2] There were 22,600 students benefiting in 1948, together with thousands of others not at the universities.[3] An effective argument in favour of better grants was obtained by comparing the number of State Scholarships and awards under the Further Education and Training Scheme with the much larger number of good honours degrees given.[4] The total of State Scholarships awarded annually had risen to 750 in 1947, and later to 800, with in addition 100 Technical State Scholarships and 20 for 'mature students' over the age of twenty-five. The £100 maintenance grant limit was removed in 1946, and standard figures were paid by the Ministry. Open scholarships and exhibitions were supplemented at the same time, being brought up to State Scholarship level by the Ministry.[5] Local authorities, relieved from having to spend more of their money upon open and State Scholars, could aid additional students. The 1948 Working Party which studied the matter felt that even this was insufficient and called for 2,000 supplemented open awards and 2,000 State Scholarships.[6] Their calculations led them to suppose that about 7,000 other persons would need to be aided annually by the local education authorities if the universities were to carry out their functions properly.[7]

Local education authority scholarships, like the central awards, had long been made on the strength of the candidates' performances in the Higher School Certificate Examination.[8] It was largely for this reason that honours and distinctions were continued at the higher level when they went out of fashion in the lower examination.[9] 'Scholarship' papers remained in the General Certificate of Education examinations for the same competitive purposes. The 1948 Working Party had, however, suggested that local scholarships, as opposed to State and university scholarships, might depend in part upon other abilities, attainments and inclinations than upon the sheer academic expertise of the candidates, and that their personalities and characters should be taken into account.[10] Two Advanced level passes in the General Certificate of Education were by now regarded as the minimum qualifying conditions, and it was not long before grants were to be dispensed to all who obtained university entrance.

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[1] *Curriculum and Examinations in Secondary Schools*, 1943, p. 41.

[2] Ministry of Education. *Education in 1947* (Cmd. 7426), p. 59.

[3] *University Awards*, 1948, p. 5.

[4] Ibid. p. 8.

[5] Ibid. p. 4.

[6] Ibid. p. 8.

[7] Ibid. p. 15.

[8] Board of Education. *Education in 1938* (Cmd. 6013), p. 21.

[9] *The School Certificate Examination*, 1932, p. 57.

[10] *University Awards*, 1948, p. 10.

When P.E.P., the political and economic planning institution, commented upon the 1948 Working Party's Report they stressed certain aspects further.[1] A clear distinction was drawn between selection for admission and selection for a grant: admission should be arranged first, and a local authority or state grant should follow later. An extension of central aid was envisaged, partly to overcome the inertia of the local authorities who were backward in aiding their students.

Some local authorities operated very careful schemes for selecting suitable recipients.[2] When the situation was reviewed by a Departmental Committee in 1960, it was stated that local education authorities should accept university decisions on entrance more unreservedly than they had done.[3] In fact, the Report recommended that State Scholarships should cease, and that all awards should be made upon a uniform basis.[4] The possibilities of placing the onus upon both the central and the local authorities were considered in detail.

Affairs had been moving in the direction of uniformity since the end of the War. The principle had been officially accepted in 1946 that, subject to need, award-holders should be paid the assessed cost of their maintenance and expenses at the university.[5] The local authorities were empowered to make awards under the Scholarships and Other Benefits Regulations, but they were not obliged to do so.[6] The Ministry of Education could suggest action which it could not enforce. Thus, in 1953, it could state that all with two Advanced levels and some evidence of a general education should be considered for a local authority grant, and that personal qualities might also be taken into account.[7] Triennial reviews of expenses at the universities guided the local education authorities as well as the Ministry in assessing the value of awards.[8] The standard figures of maintenance were worked out in consultation with the universities, the local authority associations, the Association of Education Committees and the London County Council. The complete homogeneity recommended by the Departmental Committee in 1960 was the logical extension of what was already standard practice in many areas.

The local authorities had responded magnificently to the demands. Over 16,000 awards were granted in 1959, as compared with the 7,000 envisaged by the 1948

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[1] P.E.P.: *The University Student*, 1949.

[2] *The Times Educational Supplement*, 1 July 1960; W. T. Selley: 'Selection by Panel, Bolton's way with local awards', p. 16.

[3] Ministry of Education and the Scottish Education Department. *Grants to Students* (Cmnd. 1051), 1960, p. 3.

[4] Ibid. p. 24.

[5] Ibid. p. 2.

[6] *The Regulations for Scholarships and Other Benefits, 1945*, S. R. & O., 1945, No. 666, as amended.

[7] Ministry of Education Circular 263, March 1953.

[8] Ministry of Education Circular 339, 5 June 1958. Awards at Universities and Other Institutions of Further Education.

Working Party.[1] 19,088 applications were made for local grants in 1958–59; only 2,396 were turned down, and the large majority of these were not accepted by the universities in any case.[2] The total number of State Scholarship holders had risen from about 3,000 in 1948–49 to about 12,000 ten years afterwards, and the total cost of university awards in Great Britain rose from £5.6 million in 1951–52 to £21.6 million in 1958–59.[3] Approximately 1,600 university and college scholarships were being supplemented by public funds annually.

There was considerable difference of practice between local education authorities which, though it should be viewed with a locally varying demand for higher education, nevertheless led to some comment being made. Thus, though the average number of awards per 1,000 of the population of seventeen to nineteen-year-olds was 79 in English and 128 in Welsh counties, Norfolk made only 67 awards per thousand and the County Borough of West Ham, only 16.[4] It was partly to eliminate these differences that the Report advocated that measures should be taken to provide all first degree students accepted by the universities or other institutions of higher education with uniform grants from public funds.[5] The existing habit of dual selection, once for a place and once for an award, was criticized as being wasteful. Candidates were generally expected to have two Advanced level passes, but the matter of selection was left to the universities.

The 1962 Education Act imposed a duty on the local authorities to provide grants for all accepted candidates resident in the area.[6] Regulations were made for courses starting after September 1962, prescribing payment, stipulating qualifications and designating suitable courses.[7] The local authorities were thus forced to carry the load under central direction.

A more controversial matter at the time was whether or not parents should be expected to contribute towards the cost of a university education, for their incomes had been taken into account at least since the 1920s.[8] The need for educated manpower was felt so intensely in some circles, that it was stated that higher education should be provided free of charge.[9] Teachers' associations and professional bodies in particular supported this principle.[10] A majority of the 1958 Departmental Committee favoured free education, but a minority were for a diminished parental contribution instead, and the Government backed the minority when it implemented the Report's recommendations.[11]

One of the effects of the recommendations was that the Advanced level gained some slight encouragement as a qualifying rather than as a competitive examination. For grant purposes, though not for university entry, it was only vital for the candidate to pass the examination to qualify. The State Scholarship system, and certain local award schemes, all of which were to be abolished, had tended to accentuate the competitive characteristic of the General Certificate examination, with all that this implied in distorting the school curriculum. Honour and glory were to be won only in the university entrance scholarships, in separate examinations for the super-intelligent.

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[1] *Grants to Students*, 1960, p. 23.

[2] Ibid. p. 10.

[3] Ibid. p. 2.

[4] Ibid. 1960, Appendix 5, p. 122.

[5] Ibid. p. 15.

[6] Education Act, 1962, Sections 1 (1) and 1 (2).

[7] Circular 9/62, 24 October 1962. The University and Other Awards Regulations, 1962, p. 1.

[8] *The Times Educational Supplement*, 2 January 1959, p. 7. 'University Awards and the Means Test'.

[9] *Grants to Students*, 1960, p. 47.

[10] The National Union of Teachers. *University Entrance*, 1959, p. 7.

[11] *Grants to Students*, 1960, p. 59.

6. THE AVAILABILITY OF UNIVERSITY EDUCATION

The demand for grammar school places noted in the last chapter was paralleled by a similar, though smaller, one at a higher level, this time for university places. The latter, like the former, was subjected to numerous sociological and other statistical analyses, perhaps because selection for higher education was so critical in determining the overall nature of society. Yet mention has been made in this present chapter of the 1946 Report on Scientific Manpower and similar reports, all of which suggested that potential university students were leaving school early.

Those staying on at maintained schools for at least one year beyond the leaving age formed only 21.9 per cent of the total age-group in 1950.[1] By 1962 there had been a steady increase to 33.87 per cent, and the figures would have been larger still had the independent schools been included as well. Those staying on were expected to form 56.92 per cent of the age-group by 1967; it seemed that attempts to keep children longer at school were successful, and greater numbers of university recruits were likely to result.

About 31,000 people applied to enter the university courses beginning in 1955, and only 18,000 were admitted.[2] 40 per cent were thus excluded. Some of the rejected candidates were offered places a year later, but roughly 8,500 remained, of whom 6,900 were British.[3] At least one-third of these had the necessary paper qualifications for university entrance. It appeared, then, that more university places were likely to be necessary, particularly as the larger numbers of young people resulting from the high postwar birthrate reached the age of eighteen.

The sons and daughters of manual workers provided a potential source of university entrants which was scarcely tapped at this time. Whereas 72 per cent of adults came into this category, only 26 per cent of male and 19 per cent of female students came from this social class.[4] Inherited intelligence may partly have accounted for this phenomenon, but different environments and traditional class aspirations were probably more pertinent factors, and there was some chance that these might be altered over the years. Once it was realized that increased national efficiency was likely to depend upon the careful higher education of all those capable of profiting from it, efforts could be made to encourage all able persons to stay for a lengthy education. Lack of financial aid was only one of the deterrents, but this was being remedied.

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[1] Ministry of Education. Statistics of Education, 1962, Part 2, pp. 12–13.

[2] R. K. Kelsall: *Report of an Inquiry into Application for Admission to Universities*, 1957, pp. 1–3.

[3] Ibid. pp. 14–21.

[4] Ibid. p. 9.

A later survey showed that, whereas social class played a large part in determining which students acquired a university education, this test no longer operated once the student had entered the upper sixth form.[1] Children of manual workers who survived to enter the sixth form were so exceptional that they could compete with others on equal terms. It was stated that if every possible encouragement were given, it could probably result in twice the number of male and three times the number of female undergraduates entering the universities without lowering the standards.[2] Such estimates revealed the slack in the system, and paved the way for a gradual expansion of university facilities: the children of manual workers provided a useful reserve of ability. It is worthwhile mentioning that the best means of predicting academic performance was shown to be given by the G.C.E. machinery, and that the customary interviews were relatively lacking in validity.[3] Headmasters' reports were also unsatisfactory in this respect, though they were potentially useful. Even A level results correlated quite weakly with the class of degree, according to another survey.[4]

The Association of University Teachers claimed that 5,000 young people who possessed university entrance qualifications would be turned away in 1963 because of the lack of places.[5] At the same time, however, nearly 2,000 vacancies were listed for university level courses at colleges of advanced technology and technical colleges. It may be presumed that these institutions failed to attract the students because they lacked the glamour or the prestige of the universities. This was unfortunate, for the Ministry of Education was encouraging big developments in technical education.[6] When the Joint Matriculation Board reported in 1963 upon those of its candidates who had two or more A level passes in the 1961 examinations, it was shown that the great majority of those entering employment did not wish to pursue a university course.[7] The study suggested that there was no large pool of qualified sixth-form leavers who wished to secure university entrance but were denied it.[8] It was claimed that university expansion beyond that needed to keep pace with the greater birthrate would result in lowered academic standards.[9] Fortunately this was only one side of the story. Many young people who might well have benefited from a university course may have gone instead to training or technical colleges, or entered a professional career immediately, because they were persuaded of the difficulties of entering a university. Many, from homes lacking a

[1] W. D. Furneaux: *The Chosen Few*, 1961, pp. 51–71.

[2] Ibid. p. 44.

[3] Ibid. pp. 85–99.

[4] R. A. C. Oliver: 'The Selection of University Students', *Universities Quarterly*, XVI, No. 3, June 1962, p. 264.

[5] *The Times Educational Supplement*, 19 July 1963, p. 83; K. Hartley, letter.

[6] See Chapter 8.

[7] P. Lawrence: *Sixth Form Leavers and Higher Education*, 1963, pp. 14 ff.

[8] Ibid. pp. 8 ff.

[9] Ibid. p. 30.

tradition of higher education, may have been capable of following the courses. The rapid growth in the size of sixth forms in the 1960s suggested that demand for higher education was likely to grow also.[1] Children aged 17 in maintained secondary schools formed 5.10 per cent of the total age group in 1955, but this number had grown steadily to 9.87 per cent in 1963. Although many academically weak children were entering the sixth forms the pool of students of attested university calibre was increasing. It was essentially this which was now causing the competition for university places.

7. A BALANCED CURRICULUM

When the universities first began to influence the secondary schools by examinations, there was little doubt as to the nature of the courses intended. It has already been shown that nine passes were required for matriculation at London in 1839, and that the range of subjects was still wide at the end of the century, when there was talk of their being specially adapted for school use. A sound basic education was what was required of the entrant, and a sound basic education was what the universities hoped to broadcast in the schools. The Previous Examination at Cambridge and Responsions at Oxford demanded a sound elementary knowledge of the classics. On the other hand, the local examinations established by these universities in the second half of the century for the use of schoolboys encouraged a good general education, and were specifically designed to do so. Later, the School Certificate Examinations obliged schools to teach from certain groups of subjects for the same purpose. The universities continued to use their powerful influence to support an agreed, basic curriculum in the schools. Naturally the entry requirements of London and Cambridge differed, but there was little divergence in principle when it came to determining a balanced curriculum in the early twentieth century. Only the 'group four' subjects came into dispute for a while. The universities filled a position in determining the curriculum of their tributary schools which could only have been rivalled by an organization of a national government. Central control was out of fashion when examinations came in.

Such control came gradually. For more than thirty years the Central Department did little more than coordinate the university examining bodies with the help of the Secondary School Examinations Council. What was considered to be a proper balance of studies was assured to the universities by the examining boards which largely represented their interests. The sharper tones of competition for prizes were shaded with the introduction of the School Certificate Examinations, so that these came to be regarded as qualifying tests for the majority of the candidates. Competition for honours and distinctions had previously tended to distort the general curriculum of the schools, as able pupils were entered repeatedly for different examinations. Competition for grants and scholarships had the same result, though there was less of this at first. Qualifying examinations, on the other hand, led to minimal distortion of the secondary school curriculum at the beginning of the century, and had small effect on the balance of studies at a time in which there was little competition for university places on a large scale. The 'qualifying' aspect of the examinations was frequently underlined by the Examinations Council.

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[1] Ministry of Education. Statistics of Education, 1963, Part 2, p. 6.

The curriculum became unbalanced in the turbulence following the Second World War. First, the Ministry of Education freed the schools of group requirements in their external examinations: it was no longer necessary to pass in a specified number of subjects simultaneously to receive a General Certificate of Education. Pupils with peculiar weaknesses in certain subjects were consequently aided. The forces of tradition in the schools, and the visits of H.M. Inspectors, tended to maintain the equilibrium, and lip-service at least was paid to the idea of a sound general education. Universities, colleges, and employers, too, were free to select those with such an education. For these reasons the General Certificate of Education by itself only affected the nature of the curriculum slightly. The way in which competition was stimulated by the demand for financial aid to students has been described already: with it came greater specialization.

It was unfortunate from the point of view of the curriculum that, as the availability of grants increased, so did the difficulty of entering the universities. It was this factor, a consequence of the War perhaps, that began to affect the curriculum adversely, for the high postwar birthrate resulted in large numbers wishing to enter the universities by the 1960s. These institutions were faced with a surplus of qualified entrants as financial difficulties were removed for students, and as the numbers increased for other reasons at the same time. University places did not keep pace with the demand for a higher education, and the stage was set for competitive entry on the grand scale.[1]

Competitive entry to the universities had been strictly limited to scholars, exhibitioners and (in effect) to local or central award holders after the First World War. By 1960 there was competition for every place. Ever-higher standards were demanded of entrants to the universities. A 'peck order' of universities and colleges formed itself unofficially, with Cambridge at the top of the list and with training or technical colleges lower down, for the situation was not confined to university entry.[2]

Competition for entry led to increased specialization. Pupils stayed in the sixth form for three years rather than the usual two, so that they could pass with a higher mark at Advanced level, or take Scholarship papers, and thus enter the college or faculty of their choice. Pupils were driven to achieve high grades in their specialist A level subjects at the expense of all else. Ordinary level examinations were taken as early as possible to provide extra time for sixth-form work. The examination system itself did not make any provisions for the continuance of a general education in the extended sixth-form course at first, and the universities concentrated on an Ordinary level assessment of a general education until the 1960s. The universities generally deplored the weak general education of their incoming students, but nevertheless laid emphasis in practice, upon success in specialist subjects.[3]

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[1] R. K. Kelsall: op. cit.

[2] N. Annan: 'Peck Orders among Universities', *Universities Quarterly*, XV, 1960–61, pp. 351–60.

[3] *The Times Educational Supplement*, 7 February 1964, p. 309; 'General Studies'.

There was much discussion over the question of 'minority time' in the sixth-form programme. The Central Advisory Council stated in 1959 that 25 or 26 periods out of a weekly total of 35 should be sufficient for the specialist subjects upon which the teachers and pupils were lavishing so much care.[1] It was fairly common practice to set homework in specialist subjects, but not in others. Some schools entered pupils for as many as four Advanced level subjects instead of the usual two or three, and this custom was condemned by the Advisory Council because it left so little time for other activities.[2] Teachers attempted to continue the general education of their sixth formers by lessons in such subjects as music, civics and religious instruction, but found a disappointing response because these did not really count towards university entrance. The Advisory Council analysed these general subjects into 'complementary' and 'common' types. Some language work was recommended to keep science students 'literate', while the 'innumeracy' of arts students demanded 'complementary' lessons for them as well. Certain subjects, such as religious instruction, could be taught in common.

One of the problems facing headmasters in the 1960s was the task of making minority time important. University men frequently complained of the low general education of their incoming students; usually it was the illiteracy of the scientists because there was less opportunity of testing the innumeracy of arts specialists. The Advisory Council was against the examination of complementary subjects, though tentatively agreeing with the idea of a broad general paper of the type set in entrance examinations at Oxford and Cambridge.[3] It was feared that such a fresh examination might generate in the schools the machinery for doing well in it, and that marking schemes might necessarily reward the meticulous preparation of a syllabus and so lead to an unsuitable specialization in another form. If minority time had to be examined, then there was also the possibility of using the Ordinary level papers for individual subjects. It was shown earlier in the chapter that a new 'General level' had been considered and rejected by the Examinations Council. Additional university examinations for the subjects in question were not favoured.

A measure of the urgency may be obtained by comparing a recommendation of the Headmasters' Association in April 1957, that two-fifths of the sixth-form timetable should be devoted to non-specialist subjects, with the results of a British Association Inquiry started in 1958 which found that the time actually allotted was less than one-fifth.[4] The proportion of time spent on specialist work was really much higher, for it was shown that an average weekly homework allocation in the specialist topics totalled about twenty hours, little preparation being required in the other subjects.[5]

The universities held the key to the situation because they selected the students and therefore caused the whole process of distortion to take place. No unique solution of the problem was found, but certain interested parties brought pressure to bear. Thus, Alexander Peterson, the Director of the Oxford University Education Department, called for four Advanced level passes as the normal pre-university goal.[1] While regretting the implied specialization in a general way, he felt that a point in favour of the idea was that it would enable each sixth former to follow two arts and two science courses to a high level. The gap between the 'two cultures' would be bridged, and there would be an opportunity of postponing any decision about the nature of the university course until the end of the school career.[2] Peterson had a strong faith in the merits of study in depth, and felt that his plan would compensate for the omission of general education lessons of a more orthodox type. He called a series of conferences to discuss the matter, and in the second of these requested that about thirty grammar schools should band together to work on a four-subject basis. The schoolmasters were less enthusiastic than he had hoped from the tone of the conferences, and only seventeen schools offered to cooperate.[3] Opponents attached greater importance to the subjects being taught in 'minority time'.[4] The number of supporters was too small to warrant making representations to the universities for special entrance facilities, and other methods came to be considered for broadening the curriculum.[5]

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[1] *Report of the Central Advisory Council*, 1959, p. 275.

[2] Ibid. pp. 267–68.

[3] Ibid. p. 280.

[4] *The Times Educational Supplement*, 10 February 1961, p. 265; A. D. C. Peterson: 'Sixth Form Studies.'

[5] *Universities Quarterly*, XIV, 1959–60, p. 223; A. D. C. Peterson: 'The Myth of Subject Mindedness'.

One of the alternatives was associated with a 'General Studies Research Group' centred on Haberdashers Aske's School, then in Hampstead.[6] Here an experimental approach was envisaged with fewer controversial steps, and with cautious discussion at each stage. It was proposed to work out an effective general studies syllabus for sixth-form work involving 'study in depth', to try this in associated schools, and finally to produce a report. Another alternative came when the Headmaster of Charterhouse suggested that head teachers group together to sign a pledge agreeing not to allow their pupils to specialize too soon, and to keep one-third of the time free of specialist work in the sixth form. This last plan was called the 'Agreement to Broaden the Curriculum', or the 'A.B.C.'.[7] Such schemes as these were regarded as emergency measures, for changes in the examination framework would have taken some years to materialize.[8] By 1964 the General Studies Association was making the running, suggesting internal school assessment with external moderation.[9]

The necessity of examining general studies was not universally accepted. There was not much need for external tests in the better schools, where it was known that a genuine effort was being made to give a sound general education. Pupils at Marlborough College, for example, had very little of their 'minority time' examined by 1963.[1] The syllabus covered in the 'numeracy' periods of the classical side was a demanding one, but it did not require the stimulus of an external examination. A compulsory history course for scientists and mathematicians was established at the same school in 1956, but its specially arranged G.C.E. paper was being abandoned by 1963, perhaps because this was a well-known and well-staffed school.

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[1] *Oxford University Department of Education Report. Arts and Science in the Sixth Form*, March 1960.

[2] *The Times Educational Supplement*, 7 October 1960, p. 443; 'Peterson Plan Under Fire'.

[3] *The Times Educational Supplement*, 13 January 1961, p. 52; 'Sixth Form Curricula'.

[4] *The Times Educational Supplement*, 20 January 1961, p. 99; Letter from H. Davies.

[5] *The Times Educational Supplement*, 7 July 1961, p. 11; A. D. C. Peterson: 'An Avenue Explored'.

[6] *The Times Educational Supplement*, 14 October 1960, p. 487; R. Irvine Smith: 'General Studies'.

[7] *The Times Educational Supplement*, 12 May 1961, p. 974; 'Broadening the Sixth'.

[8] *The Times Educational Supplement*, 7 July 1961, p. 11; A. D. C. Peterson: 'An Avenue Explored'.

[9] *The Times Educational Supplement*, 15 May 1964, p. 136; R. Irvine Smith: 'Reforming the Sixth'.

The 'history for scientists' paper at Marlborough was set on syllabuses designed by a joint committee of the school and its examining board. It was suggested by one of the examiners that this scheme should be extended to other schools.[2] Places such as Marlborough College, which felt they could afford to be progressive, were in the happy position of being able to do without some of the external examinations that were necessary elsewhere. It was in the schools with smaller reputations that inertia was most apparent, for these tended to rely upon the examination papers that were provided for them. They did not take full advantage of the flexibility of the G.C.E. framework, and they did not feel capable of running worthwhile courses without external examinations. Several examples of specially arranged examinations will, however, be given in the next chapter. Most but not all of the examining boards already set papers to test the general education of sixth formers.

The Northern Universities Joint Matriculation Board had set a general paper at Ordinary level since 1951, and it was partly because of its success that another paper was set at the higher level.[3] An experimental paper at Advanced level was constructed in 1955; in 1959 it was put on a more formal basis, and a Report was made on its progress in 1960.[4] It was possible to free pupils from external examinations throughout the school course with the help of this examination, as students of university calibre might now take Advanced level specialist and 'general studies' papers in their final term and still have their necessary qualifications for further education. The new general paper was, however, also suitable for non-university pupils in grammar schools. The questions were grouped around such headings as 'current affairs', 'general science', 'the fine arts', and 'literature', and there was an optional test in spoken English. 1,530 candidates took part in the first proper examination, and their pattern of success was said to correlate well with their estimated performance and with their other Advanced level marks, indicating the examination's likely effectiveness in helping to select university entrants. Three-fifths of the 1962 entry of 5,693 to the examinations failed, however, which may have created an awkward situation for any who had staked their general education on this examination.[5]

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[1] Letter from D. A. Quadling, the Senior Mathematics Master at Marlborough College, 21 July 1963.

[2] *The Times Educational Supplement*, 5 July 1963, p. 13; Dora Pym: 'History for Scientists – Marlborough Experiment'.

[3] R. A. C. Oliver: *The Joint Matriculation Board Examination in General Studies, 1957*, 1958.

[4] R. A. C. Oliver: *General Studies (Advanced) in the G.C.E.*, 1960.

[5] *The Times Educational Supplement*, 4 January 1963, p. 14.

State Scholarship candidates of the Cambridge board had been expected to take both a general studies paper and a 'use of English' paper since 1951.[1] The latter was set in an attempt to encourage sixth formers to use their mother-tongue properly: no syllabus was laid down, though it was customary to require composition from given data, précis work, and answers to comprehension exercises. The paper gained significance when Oxford and Cambridge proposed to make such a test compulsory for all entrants.[2] The Cambridge Syndicate on the Previous Examination, which debated the issue, suggested that the University itself should set the paper, should any of the examining boards fail to do so. Their Oxford counterparts on the other hand, felt that the matter should be left entirely to the examining bodies. The London Association for the Teaching of English reflected a common view when it called for 'use of English' papers in which the candidates could not be coached.[3] A paper of general essays was envisaged, with a very wide choice of topics, like the 'general questions' Scholarship paper at Cambridge. It was held that comprehension of a printed passage should form part of the test. The Joint Matriculation Board of the Northern Universities set such a paper for the first time in March 1963, for university entrance purposes only.[4]

General papers, as distinct from 'use of English' papers, had been set by six of the nine examining bodies for some years.[5] There were several types, but they all counted as Ordinary level subjects, apart from the Northern paper already described. The majority were intended for State Scholarship purposes at first, and were not meant to discriminate between ordinary university entrants.

The special position of Oxford and Cambridge among the English universities was emphasized by their peculiar entrance requirements. Fresh methods of qualification were urged upon candidates after May 1960.[6] Two Advanced level passes were to be required for the first time from 1961 onwards, for matriculation purposes; Responsions were to be abolished; science students at Oxford need offer Latin or Greek no longer. Ordinary level passes in English, two languages, and in mathematics or science were required, but the English qualification was later to be replaced by introducing the 'use of English' paper. The main effect of this was to stop science candidates having to learn Latin merely for entrance purposes. In maintained schools particularly, science specialists would often neglect Latin in the lower school, only to find that they needed it later when it was realized that they had a chance of going to Cambridge or Oxford. Cambridge went one step farther than Oxford, and made it possible for every entrant to avoid Latin and Greek. Two Advanced and five Ordinary level passes were required, the 'use of English' paper was ultimately to be made compulsory, and the Previous Examination was abolished.[1] A reappraisal of Oxford and Cambridge entrance methods was made, bringing the older universities into association with the clearing-house system that was being established by the Universities Central Council on Admissions. Oxford, for example, was to finish its selection by January each year, to allow the other universities time for dealing with its rejected candidates.[2] At the same time it was arranged that examinations, in two parts, should be set for all entrants or scholars. The first part was to qualify candidates for entrance, the second was to provide a test for scholarship competitors. Three groups of colleges were to be formed for examination purposes.

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[1] University of Cambridge Local Examinations Syndicate. General Certificate of Education Regulations for 1951, p. 6.

[2] *Reports of the Oxford and Cambridge Committees on Entrance to Oxford and Cambridge*, 1960.

[3] *The Times Educational Supplement*, 9 February 1962, p. 245; 'Coach-Proof Examinations Wanted'.

[4] *The Times Educational Supplement*, 1 June 1962, p. 1135.

[5] *Sixth Form Studies and University Entrance Requirements. The Sixth Report of the Secondary School Examinations Council*, 1962; Part III, *Report of the General Studies Sub-Committee*, p. 30.

[6] *The Times Educational Supplement*, 20 May 1960, p. 1043; 'Oxford's New Statute'.

An important move in support of the examination of general studies was made by the Committee of Vice-Chancellors and Principals in 1962. A sub-committee reported that most of the universities favoured new entry conditions for students. Two sorts of requirement were suggested, termed 'course' and 'general', and more emphasis was now placed on the latter. At least two Advanced level passes were required for 'course' requirements, as before. Passes in as many as three types of paper were also felt to be essential for the 'general' requirement, for the principle of examining minority time was accepted as a necessity. A 'use of English' paper and a general paper of the kind already described formed two of the three possibilities, while a foreign language paper formed the third. The papers were only to qualify candidates, and there was to be but one grade of pass. Candidates were not to take the papers before they had spent one and a half years in the sixth form, for it was intended to force university candidates to continue their general education. The Report announced that the 'use of English' paper would become compulsory for entrants to Oxford and the Northern Universities in 1964, and to Cambridge in 1965, although it was being used frequently before this. Cambridge, London and Reading Universities had certain doubts about the Committee's plan in principle, while Oxford had not come to any decision at the time of the Report.[3] There were complaints from London University in particular at the lack of consultation.[4]

Peterson explained why the proposals were not welcomed more warmly by the schools. He stated that an increased examination burden would weigh down upon them, and that it would be difficult to mark the papers. It was thought, too, that the papers would discriminate against candidates from the less cultured homes, and also from the smaller and more poorly staffed schools. Possible modifications suggested included the introduction of a syllabus in the general paper and the admission of gradings in place of a pass or fail barrier.[5] Serious opposition came from London University, whose general policy it had been for some years to throw the responsibility of giving a sound general education on the schools themselves, without the rigidity of an external examination.[1] The Principal, Sir Douglas Logan, doubted the wisdom of introducing 'use of English' papers when so little was known about them, and feared that intensive preparation for the general paper would increase the burden on candidates.[2] It was for these reasons that the influential London examining board refused to set a 'use of English' paper. The policy was similar to that enabling London University entrants to qualify without the usual passes in English, in a foreign language, or in mathematics or an approved science at Ordinary level. This policy, promoted since 1955, had attempted specifically to rest the responsibility of giving a broad, balanced education on the schools.[3] The rift between those for and against the idea that general education should be confirmed by examination for university entrance purposes was visible in a 1955 report when a sub-committee of the Committee of Vice-Chancellors and Principals split on this very issue. Those favouring an examination were all university men while, apart from the two London University representatives, all the opponents of the idea were secondary school teachers.[4]

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[1] *Reports of the Oxford and Cambridge Committees on Entrance to Oxford and Cambridge*, 1960.

[2] *The Times Educational Supplement*, 23 November 1962, p. 680; 'Oxford Admissions, Report Accepted'.

[3] *The Committee of Vice-Chancellors and Principals. Report of a Sub-Committee on University Entrance Requirements*, April 1962.

[4] *London University. Report by the Principal*, 1961–62, p. 130.

[5] *The Times Educational Supplement*, 29 June 1962, p. 1331; A. D. C. Peterson: 'University Entrance'.

The examination of general studies was also opposed by those who feared that it would fail to encourage fundamental knowledge, but would cater for the dilettante.[5] A general paper was, however, backed by some who thought that a 'use of English' paper might follow the path of the English language paper at Ordinary level. Denys Thompson, the Editor of *The Use of English*, stated that a testing device might all too easily become a teaching method. There was no evidence that the proposed 'use of English' paper would be the most valid for the purposes it was intended to serve.[6] Thompson suggested that a general paper would have been more appropriate.[7] Others said that performances in the general studies for entrance and scholarship examinations at Cambridge were 'a standing joke among boys and masters'.[8] There was considerable evidence in the Press of dissatisfaction with the 'use of English' papers.[9] At least one example can be quoted of a Cambridge exhibitioner in mathematics who failed the 'use of English' paper but was nevertheless permitted to matriculate on the strength of a 'grade 1' in English at both Ordinary and Advanced level, suggesting that the universities themselves were not wholly convinced of the paper's worth.[10] Two sub-committees of the Secondary

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[1] University of London General Certificate of Education Subject Reports, Summer 1961, pp. 1–2.

[2] *London University. Report by the Principal*, 1961–62, pp. 132–33.

[3] Ibid. p. 129.

[4] *Committee of Vice-Chancellors and Principals. Report of a Sub-Committee on University Entrance Requirements*, 1955, Appendices 1 and 2, pp. 15 and 20.

[5] *Universities Quarterly*, XIV, 1959–60, p. 388; John Holloway: 'The Use of English and the Use of Literature'.

[6] *Universities Quarterly*, XV, 1960–61, p. 13.

[7] *The Use of English*, XI, No. 4, 1960, p. 221.

[8] *Universities Quarterly*, XV, 1960–61, pp. 14 and 21.

[9] *The Times Educational Supplement*, 21 June 1963, p. 1370.

[10] Cheshunt Grammar School Records: 1963.

School Examinations Council were formed at the end of 1960 to discuss general studies and English language examining, the latter involving both use of English and Ordinary level English language papers.[1]

Reports of the two sub-committees were published in the Sixth Report of the Secondary School Examinations Council, and were chiefly designed to answer the proposals of the Committee of Vice-Chancellors and Principals earlier in the year. The Examinations Council was critical of the nature of existing 'use of English' papers, and feared an artificial division between the form of expression used and the actual content.[2] It was felt that testing 'use of English' in general studies papers might ensure that candidates had something to write about. The comments on the general papers were a little less reserved although such examinations so far had been mainly concerned with the abler candidates entering Oxford or Cambridge, or trying for State Scholarships, and not with average sixth formers.[3] It was clear, however, that at heart the Council was against fresh examinations when the university entrance situation was so competitive, fearing that the problems generated would be worse than those solved. Further experiment was needed, for example, with the external assessment of internal examinations which was being considered by the Oxford and Cambridge Joint Board.[4] This might ensure that pupils became involved in continuous writing on a wide range of subjects which were of interest to them, and that they kept up this practice between the ages of sixteen and eighteen. Some schools were already making general studies the central part of the sixth-form course, and fitting A level specialist subjects about this core.[5] It is to be suspected, however, that opinion in the schools and among university selectors had not reached that intensity which would lead to effective action on a large scale.

A study of the test in English for University Entrance carried out for the Northern Board showed that there was room for improvement in the form of the examination.[6] But it revealed what many had suspected: that a considerable number of those capable of gaining two or more A level passes were nevertheless weak in English. If the test was valid, then many well-qualified specialists had difficulty in expressing themselves in writing. Perhaps their education had lacked balance.

The Ministry of Education urged examining boards and subject panels to reduce the Advanced level syllabuses to ease the pressure of specialization, and also to limit Special papers to the same syllabus; some movement in this direction was soon apparent.[7] Regulations after 1962 began to show signs of pruning, though often in theory rather than in practice. Thus, one examining body, faced with a reduced syllabus for its Special papers between 1963 and 1964, introduced a completely new Advanced level subject entitled 'Further Mathematics', which encouraged sixth formers to specialize more than ever.[1] In 1961, even the Chairman of the Examinations Council could be quoted in favour of having some machinery for 'stretching' the abler pupils, though on the whole he wished for reduced Advanced level syllabuses.[2] The importance of specialist, as opposed to general subjects, continued to lie in the balance. There was every prospect of continued tension while it could be claimed that one-quarter of the total number of qualified applicants for university places were being turned away.[3]

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[1] *Sixth Form Studies and University Entrance Requirements*, 1962, pp. 9 and 30.

[2] Ibid. p. 5. [3] Ibid. p. 6. [4] Ibid. p. 3.

[5] *The Times Educational Supplement*, 31 January 1964, p. 225; Miss G. O. Lack: 'Liberating a Sixth Form; Oxford demands vindicated'.

[6] R. A. C. Oliver: *Studies in a University Entrance Test in English*, 1964.

[7] *Education in 1961* (Cmnd. 1737), p. 16.

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[1] University of London. Regulations and Syllabuses for the General Certificate of Education Examinations, 1964–65, July 1962, p. 81.

[2] *The Times*, 27 February 1961.

[3] *The Times Educational Supplement*, 23 November 1962, p. 684; 'One in Four Fail, A.U.T. University Entrance Inquiry'.

CHAPTER SEVEN

Examinations and Secondary Education

1. THE DISTRIBUTION OF POWER

The last chapter treated the relationship between the secondary schools and the universities, and more attention was therefore given to the Advanced level examintions for the General Certificate of Education. This chapter, on the other hand, will show how examinations were adopted by secondary modern schools as well as by grammar schools, and so will be concerned with the Ordinary level examinations, amongst others.

A recurring problem in the study of English educational administration is the maintenance of a just distribution of power between local and central authorities. Examinations illustrate this for, like financial control, they can be a means of exerting power. Financial control is inescapable: 'He who pays the piper, calls the tune.' Once the financial framework has been set up, however, examinations can prove more effective in determining the real nature of the education given in the classroom. Grant controls and central inspection have proved relatively clumsy methods, when compared with examinations, in forming the details of the school curriculum. For many years, grants to schools from the central government have been made indirectly, through the local bodies; there is little evidence to suggest that they affected the curricula other than in a general way since the eclipse of the Revised Code and of the early Secondary School Regulations which specified that certain subjects should be taught in schools.[1]

The visits of Her Majesty's Inspectors have long been sufficiently infrequent to be the cause of a considerable commotion within each school. External examinations, in contrast, are annual events to which school syllabuses are geared directly, and they affect the day-by-day teaching more intimately. The examinations are conservative enough to resist the sudden changes of a zealot, though able to withstand alteration over the years.

It follows that the right control of examinations must be of paramount importance, as those controlling the examinations play so large a part in determining the nature of the education in the schools. The distribution of power in this respect has always been a vital issue, and the relationship between the Board of Education, the university examining bodies, the Secondary School Examinations Council, and the schools has already been explored in some detail.[2]

Membership of the Examinations Council altered in the course of time. Representatives of the examining bodies were removed in 1946, demonstrating one of the ways in which power at the top could be placed in different hands by the Minister. The Minister's own nominees were increased from five to eight in 1961, when the membership was expanded to allow the Council to deal more effectively with modern school examining.[1] When, at the same time, only a few people with modern school experience were appointed, there were criticisms in Parliament and elsewhere about the distribution of power.[2]

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[1] *Report of the Committee of Council on Education*, 1861–62, Revised Code, pp. xvi ff.; Board of Education. *Regulations for Secondary Schools, 1904–05* (Cd. 2128), Prefatory Memorandum, p. 9.

[2] See Chapters 3 and 6.

The effect of such changes in power at this level upon the schools may be illustrated by the matter of group requirements for the School Certificate Examinations. In the previous chapter it was mentioned that a fourth group of subjects was started in 1923–24, consisting at first of art and music, and that this list was gradually extended to include handicraft, domestic science, and other practical subjects. Headmistresses were calling in the 1920s for a pass in group one, together with a pass in any two of the other three groups. Examining bodies, being of university origin, resisted what they may have felt to have been a lowering of standards, and continued to ask for a pass in each of the first three groups. The Examinations Council had to consult the Board of Education on what was a matter of policy, and the Board suggested, as a compromise, that a pass in each of groups one, two and three should continue to be demanded, but that two group four subjects might now be offered, instead of just one, to count towards the total for the School Certificate. In 1926, therefore, it shared the view of the university members of the Examinations Council that the group system needed no modification. The Council was reconstituted in March 1936, so that the universities and examining bodies had only one-third of the seats, instead of nearly one-half. Control therefore passed from the university representatives, and a majority in 1938 recommended that Certificate conditions should not require the candidates to have succeeded in both language and science groups. The Board of Education agreed with its Advisory Council.[3]

The bitterness of the examining bodies at their exclusion from the reconstituted Examinations Council after the Second World War may be judged from some of James Petch's writings.[4] The Board of Education had, oddly, appointed the Norwood Committee of the Secondary School Examinations Council in 1941, incidentally demonstrating increased central powers. The examining bodies were not even consulted when the G.C.E. examinations were being planned. The contrast with the position after the First World War was striking. The examining boards were apparently being reduced to becoming the servants of the central government, whereas they had once been rather the executive, and some, perhaps, the policy-forming organs of the universities which took responsibilities in this particular field. In 1946, the Minister's own intentions were clear enough: she intended to provide central initiative in the field of secondary school examining.[5] The Secretaries of the examining bodies later formed an Advisory Panel to the Secondary

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[1] *Education in 1961* (Cmnd. 1737), p. 18.

[2] *Parliamentary Debates*, 592, 31 July 1958, Col. 1564.

[3] R. V. Vernon and N. Mansergh (eds.): *Advisory Bodies. A Study of their Uses in Relation to Central Government, 1919–39*, 1940, pp. 203–4.

[4] J. A. Petch: *Fifty Years of Examining*, pp. 163–81.

[5] Ministry of Education Circular 113, 1946.

School Examinations Council, but they were excluded from major policy decisions, and operated in an atmosphere of frustration.[1]

Whether or not representation on the Examinations Council reflected a real state of power is difficult to say. Thus, when the Ministry laid down an age limit for its School Certificate Examinations in 1950, the ruling was ignored by one of the examining bodies. The Examinations Council, which had the nominal power to advise the Minister to withdraw his approval from the body, found itself unable to do so in practice. The ruling had to be modified instead.[2]

Inspection and examination had at one time been regarded as two means of achieving a similar end. Both mechanisms controlled the schools externally, setting common standards and providing ways of comparison. Secondary school inspection had initially been carried out by university examining bodies, and it was then defended as an antidote to cramming and overpressure resulting from examinations alone. The central office had virtually no powers in secondary education in the nineteenth century, but the 1904 grant regulations insisted upon Government inspection in maintained secondary schools, and so university inspection tended to lose its popularity because it would have led to duplication.

H.M. Inspectors carried out other functions as well, but with the examining bodies they were to bear some strong responsibility for the curriculum in schools. Suspicion of the Board of Education and all its agents at the beginning of the century was to be changed (partly by the tact of its inspectors), to such good effect that there were few schools, even outside the state system, which had not voluntarily requested inspection by the Board by 1943.[3] There were demands for the inspectorate to take a larger part in the business of examining by 1930, and these were closely followed by the 1931 Investigation, in which the inspectors played so important a role.[4] Later, the Norwood Committee recommended that the number of inspectors should be increased, partly to capitalize upon their prestige and goodwill, and partly to coordinate the system of internal examinations which it was hoped would replace the School Certificate Examination.[5] A proposal for the reorganization of the inspectorate for examination purposes had already been made in 1911, when it was felt that examination and inspection should be more closely linked. Apart from the external examinations there was then talk of a 'Secondary School Testamur' based upon internal examinations and school records.[6]

Her Majesty's Inspectors in the twentieth century developed a tradition of assistance in the schools that was none the less effective for being relatively informal. Inspectors were not directly represented on the Secondary School Examinations Council at first, but they permeated the panels of investigators of the Certificate Examinations between the Wars. More than one-third of the 1931 School Certificate Investigators at London University were inspectors.[1] John Leese has described the influential part they played in the course of the investigations.[2] They affected the course of examining, and hence the nature of the curriculum, in a less obvious though more direct way than by their visits to schools. Later, in the Examinations Council after 1947, six Ministry representatives attended as 'assessors', and both secretaries were inspectors.[3] All committees of the Examinations Council had Ministry representatives attached to them in 1962.[4] Central contact with the secondary schools through the examination system was not, therefore, neglected; but there were other involved parties as well, with even greater interests.

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[1] *The Times Educational Supplement*, 1 May 1964, p. 1156; G. Bruce: 'The Same Old Rose? A harder look at the C.S.E.'

[2] J. A. Petch: op. cit. Note to p. 75.

[3] Board of Education. *Curriculum and Examinations in Secondary Schools*, 1943, p. 50.

[4] *The Times Educational Supplement*, 13 December 1930, p. 497; 'Secondary School Examinations'.

[5] *Curriculum and Examinations in Secondary Schools*, p. 52.

[6] *Report of the Consultative Committee on Examinations in Secondary Schools* (Cd. 6004), 1911, pp. 109, and 133–34.

2. LOCAL BODIES

Local bodies, one might well assume, should be linked with localities, and as the bodies discussed below are not necessarily local in the geographical sense one might suspect that the heading was deliberately misleading. This is not the case, for it is intended to discuss bodies which are complementary to the central one. Perhaps 'peripheral' would be a better term, though the London University Entrance and School Examinations Council would be unlikely to agree to such a description. It is proposed to consider the nature of the various secondary school examining boards.

Many of these bodies were already in existence before the formation of the Examinations Council in 1917, and they tended to perpetuate their own modes of conduct. Thus, the Oxford and Cambridge Joint Board continued to concern itself principally with boys' public schools. The Cambridge Local Examinations Syndicate operated very largely in rural areas and in county towns; the Oxford Delegacy preserved long connections with ancient grammar schools, convents, and private schools. The Central Welsh Board lived on as part of the Welsh Joint Education Committee after 1948. The two largest bodies by the middle of the century were those of the Northern Universities and of London, generally operating in their own neighbourhoods, although the latter had many overseas interests.[5] From time to time there were calls for the organizations to be revised upon a regional basis to make it easier for teachers and examiners to meet and discuss their work.[6] Nothing came of this amongst the General Certificate of Education examination bodies, though the Certificate of Secondary Education was planned more rationally.

The examining bodies varied in size and, therefore, it might be suspected, in efficiency. Within limits, an office and its staff can be used to deal with a greater number of examination papers at a cheaper rate; and more important than this, a large board can cater economically for a richer variety of subjects. 33.4 per cent of the total number of candidates took the Oxford Local Examinations in 1918, as compared with 0.3 per cent who sat for the Bristol papers. In 1930 the numbers varied between 28 per cent taking the Northern and 0.8 per cent the Bristol examinations.[1]

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[1] *Report of the Panel of Investigators into the School Certificate Examinations of the University of London*, 1931, p. 1.

[2] J. Leese: *Personalities and Power in English Education*, 1950, p. 283.

[3] *Examinations in Secondary Schools*, 1947, p. 2.

[4] Ministry of Education. *Examinations in Secondary Schools. The Certificate of Secondary Education. The Fifth Report of the Secondary School Examinations Council*, 1962, pp. iv–v.

[5] J. A. Petch: op. cit. p. 81.

[6] J. L. Brereton: *The Case for Examinations*, 1944, pp. 173–75.

It was mainly for reasons of size, and to give the examining body a larger field of candidates, that Bristol's little secondary examining board was merged in a new Southern Universities Joint Board for School Examinations, Bristol being joined first by the Universities of Reading and Southampton and later by Exeter. The first examination under the new regime was in 1957.[2]

The Durham University Schools Examination Board was to end its work after 1964. Again, its size contrasted strongly with that of the majority of examining boards. Although close relationships between the schools and the examiners were greatly aided by the small scale of the system, it was not possible for such a body to maintain as wide a variety of papers as a larger board.[3] The Durham Board concerned itself almost entirely with candidates from the surrounding districts, while the University itself was taking entrants from all over the country in ever-increasing numbers. The Durham secondary school examination was relatively isolated, and made comparisons difficult for university entrance purposes.

It is significant that measures were taken to alter the one and do away with the other examining body on the grounds that they were too local. As the Bristol and Durham Examining Boards were being modified or concluded, another sprang up in the form of the new Associated Examining Board, familiarly known as 'the ninth' for some years. The new board was in no sense local, but was intended to help to introduce fresh subjects of a more practical nature. The examining boards that were to be in existence after 1964 were therefore to be non-local in the usually accepted sense. Some were to be primarily, though not exclusively, regional, for the London, Northern, Southern and Welsh Boards had vaguely defined territories in which the bulk of their candidates resided. Others operated on a nationwide scale. In the main the Oxford and Cambridge Joint Board continued to cater for a certain type of school; the Associated Board acted similarly, the largest numbers of its candidates coming from technical schools and colleges, and from further education establishments scattered over the face of the country.[4]

The new body was not introduced upon economic grounds, but for a fresh purpose. Almost every tradition in the original eight bodies pointed to an academic education in a grammar or public school of the standard type. These bodies were not all prepared to satisfy the demand for papers in the practical type of subject taught in further education institutions, nor were they immediately able to participate in the 1950s. Several examining organizations did already exist in the field of technical education, but these were in no way associated with the Secondary School Examinations Council which alone could recognize secondary school examining bodies.

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[1] *The School Certificate Examination*, 1932, p. 19.

[2] Southern Universities Joint Board for School Examinations. General Regulations and Syllabus for the General Certificate Examinations, 1962, p. 1.

[3] *The A.M.A.*, May 1962, p. 145.

[4] Associated Examining Board. Report for the Period 1 October 1958, to 30 September 1959, Appendix III(b), p. 14.

An early proposal by the Durham University Schools Examination Board, that the best method of achieving acceptable technical examining in schools was to arrange for cooperation between the eight examining bodies and the seven examining unions of technical and vocational subjects, was to have some results. There were four regional unions: the East Midlands Educational Union, the Northern Counties Technical Examinations Council, the Union of Lancashire and Cheshire Institutes and the Union of Educational Institutions. Three others acted on a wider scale, namely the City and Guilds of London Institute, the Royal Society of Arts, and the London Chamber of Commerce.[1] The largest examining body was linked with the largest of the regional unions in 1951, when the Northern Universities Board and the Union of Lancashire and Cheshire Institutes formed a Joint Standing Committee. This committee met to consider the problems of examining in technical, practical, and non-academic subjects in general and, as a result of its deliberations, 22 technical or commercial papers were set in the 1954 G.C.E. Examinations.[2] Not all the boards were prepared to take such steps, though some other development was made in this direction.

The Ministry of Education took up the idea of an additional complementary G.C.E. examining board in 1953, gave approval for a constitution, and saw it setting papers by the summer of 1955.[3] The Minister of Education's beliefs were put clearly in Circular 289, in 1955.[4] It was stated that pupils in all kinds of schools who were suited to examinations for the General Certificate of Education should be given the opportunity of taking them. The use of external examinations other than the G.C.E. was firmly discouraged, and the 16 + age limit was retained in the grant regulations to hinder entry for examinations of a lower standard than the approved ones. Closer links between the schools and the employers were the official answer to the demand for better recognition of technical ability at a lower level, and the likely advantages of record cards and internal school examinations were extolled.

The Associated Examining Board was flourishing before fresh developments arose in secondary school examining. There were 11,532 subject entries in 50 Ordinary level subjects in 1956, and 299 entries in 30 Advanced level subjects.[5] By July 1959, the Board, which had been provisionally recognized since 1953, was approved by the Examinations Council, and all universities had agreed to accept its examinations by the end of the year.[6] 200,762 entries were received for the summer

[1] J. A. Petch: op. cit. Note to p. 177.

[2] Joint Matriculation Board. *Technical and Commercial Subjects in the General Certificate Examination*, January 1954, pp. 2–3.

[3] *Education in 1953* (Cmd. 9155), p. 14.

[4] Ministry of Education Circular 289, 9 July 1955.

[5] *Education in 1956* (Cmd. 223), p. 18.

[6] *Education in 1959* (Cmnd. 1088), p. 22.

examination in 1963.[1] New subjects, such as electronics, food science, building mathematics and laundry work were envisaged from the start. Raised entry standards to National Certificate courses in technical colleges were expected to be a consequence. The administration of the new board was to be undertaken by the City and Guilds of London Institute initially at least.[2]

The membership of the Associated Examining Board was a matter which aroused comment, because of the small number of serving teachers involved.[3] The nature of its origins dictated that there be two representatives from each of the seven examining unions involved in technical or commercial work. There were representatives, too, from local authority and technical associations. Six university and five professional representatives were admitted, and there were six coopted members, but there were only nine or ten teachers' representatives of a total exceeding fifty, and even these were officials rather than practising teachers.[4] Although the Ministry had played a leading part in introducing the new board, there were no Ministry representatives; in this respect the new board followed existing practice.

It is instructive to compare its membership with that of other boards. In 1939 the Oxford and Cambridge Examinations Board was composed of one Vice-Chancellor and twelve members from each of the two universities; there were four coopted members, all heads of great independent schools.[5] After 1951 there were twelve coopted members, including some assistant teachers from the same type of school, but few other changes.[6] The University of Durham's Schools Examination Board in 1951 included, amongst others, the Secretary of the Northern Counties Technical Examinations Council. Seventeen faculty representatives of the University were balanced by twelve nominees from the four secondary teachers' associations and eight from the education committees and local education authorities.[7] The Northern Board had been in favour of having the advice of teachers and administrators from the start, having three at the beginning of the century, and as many as twelve by 1938.[8] Coopted members on the Northern Board were not delegates in any sense: they were appointed individually by the Board which had, in addition, four members from each of the five universities concerned.[9]

It was unusual to admit schoolteachers to membership of the boards at the beginning of the century, probably because it was felt that, as interested parties, they would be unsuitable for examining their own pupils, and out of place in discussing matriculation affairs. Teacher-representation on the examining boards varied considerably fifty years later. The boards ranged in their membership from the democratically amorphous Associated Examining Board, with representatives nominated by dozens of organizations, to the Oxford and Cambridge Joint Board, almost all of whose members had Oxford and Cambridge backgrounds and public school interests. On some boards there were serving teachers, on others again their representatives; on others, individuals were coopted. The proportion of secondary school teachers was not high, so their control was theoretically limited. The National Union of Teachers, the largest of the teachers' unions, was still struggling for representation on six of the examining boards in 1960.[1] But eight of the 20 members of the London University Entrance and School Examinations Council were 'selected to represent the views of those connected with secondary education'; the National Union of Teachers and the Joint Committee of the Four Secondary Associations nominated some of these as well as some of the members of the Advisory Committee on the G.C.E. Examination.[2] 15 of the 22 members of this committee were practising teachers in 1964, so that it could not be said that teachers were being excluded from some control of the examinations.[3]

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[1] City and Guilds of London Institute. 84th Annual Report, 1962–63, pp. 61–62.

[2] *The Times Educational Supplement*, 9 July 1954, p. 684.

[3] J. A. Petch: op. cit. p. 179.

[4] Associated Examining Board Report, 1958–59, pp. 3–5.

[5] Oxford and Cambridge Schools Examinations Board, 66th Annual Report, 1939, p. 4.

[6] Oxford and Cambridge Schools Examinations Board. Regulations for Certificate Examinations for the Year 1951, p. 3.

[7] University of Durham Schools Examination Board. Regulations for the Award of the General Certificate of Education, 1951, p. 4.

[8] J. A. Petch: op. cit. p. 35.

[9] 51st Annual Report to the Universities constituting the Joint Matriculation Board, 1954, Frontispiece.

3. CONTROL BY THE TEACHERS

School examinations, although the business of secondary school teachers, were controlled by external examining boards, mostly of university origin. Apart from the gradual admission, over the years, of a relatively small number of teachers' representatives to board membership, the formal responsibility for the examinations remained little altered at this level. Absence from the boards did not prevent the teachers from influencing the examinations considerably in practice.

There was little teacher-participation in the nineteenth century. The mighty men from Oxford and Cambridge who descended upon the town of Exeter in 1857 were external examiners in every sense; they were representatives of a different way of life.[4] But already, by 1895, there was some talk of teacher-representation upon the examining boards. The main case against this at the time was the likely exclusion of small schools, or private schools, from having any influence upon the examinations under such arrangements.[5] These little schools, it was felt, might be unjustly treated, and the grammar and public schools at that time had not achieved a monopoly of respectability. Cooperation with the teachers was advocated more firmly after the turn of the century while, before this, disinterestedness was almost a virtue in an examiner.

Various administrative devices were used from the beginning of the century to enable teachers to take part in the process of examining. The 'schools' examinations of the Northern Board, which took effect from 1910, were administered by a standing committee of ten, which included three coopted members with experience of schools.[1] There were, by 1963, five standing committees of the Northern Board, and many schoolteachers sat on the Examinations Committee in particular. This committee effectively governed the formation of syllabuses and the appointment of examiners, and had general oversight of the examinations as a whole.[2] Syllabus reform was achieved by appointing special committees, and the numerous preparatory committees which drafted the actual question papers also consisted very largely of practising teachers, certainly for O level. Every attempt was thus made to ensure that teachers were actually involved in examining the sort of work of which they had experience. The General Secretary of the Cambridge Local Examinations Syndicate has attributed the Northern Board's swift success to the existence of teachers in its membership.[3] It was not until 1932 that Cambridge began to profit likewise.

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[1] *N.U.T. Report for 1960*, p. 83.

[2] University of London. Regulations and Syllabuses for the General Certificate of Education Examinations, Summer 1961 and January 1962, 1959, p. i.

[3] *The Times Educational Supplement*, 1 May 1964, p. 1156.

[4] See Chapter 3.

[5] *Report of the Royal Commission on Secondary Education*, 1895. Vol. 1, p. 162.

The Board of Education had laid it down as a principle in 1915 that teachers should be brought into touch with examining bodies by some system of representation or consultation, by the right to submit their own syllabuses for the examinations, and by the provision that head teachers should submit estimates of the merits of candidates from their schools in each examination subject.[4] From that year onwards the Board of Education aimed to give the teachers a greater part to play, and so to place control of the school curriculum further in the hands of those most interested. The development of the universities in secondary-school examining work had taken the control of the school curriculum away from professional and sectional interests and placed it in the hands of university boards composed of people essentially interested in education. The Board of Education now intended to extend this idea, and give greater control to the teachers themselves, a matter which took several decades to popularize, and which was still not completed in the 1960s.

Methods of cooperation between the schools and the examining bodies were treated fully in the Report following the investigation of the 1931 School Certificate Examinations. It appeared that all examining bodies at that time permitted schools to submit their own syllabuses, generally for an additional fee of between two and three pounds for each of them. Little advantage was taken, for of 460 schools using the Northern papers, only 16 schools required 20 such papers to be set.[5] Only one of the examining boards made school record submission compulsory in 1931, but only one forbade the practice, which was felt to be useful in dealing with borderline cases.[6] The growth of oral tests and science 'practicals' added to the number of ways in which teachers could participate in secondary school examinations, for many examiners were needed.

The Higher School Certificate investigators, of 1937, came to the conclusion that teachers in secondary schools were particularly suitable persons to be entrusted with the work of moderation, and also made the suggestion that local authorities awarding scholarships on the results of a board's examinations should be represented on the examining body.[1] It was noted, however, that teachers were not so free for marking purposes as university men, because they were at work during the busy time of the year.[2]

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[1] J. A. Petch: op. cit. p. 125.

[2] J. A. Petch: *The Joint Matriculation Board. What it is and what it does*, 1963, pp. 7–8.

[3] J. L. Brereton: *The Case for Examinations*, 1944, p. 81.

[4] Board of Education Circular No. 933, 1915.

[5] *The School Certificate Examination*, 1931, p. 43.

[6] Ibid. pp. 44–45.

After the Second World War, much of the work of preparing syllabuses, question papers and marking schemes for the Northern Board was carried out by schoolteachers and, indeed, they played a predominant part.[3] The Board worked through *ad hoc* committees in drafting new syllabuses, and these offered schoolteachers a chance of participating very fully. The four main associations of grammar school teachers were also consulted before any major changes were made. As to the examiners themselves, 486 out of 605 involved in the 1950 Northern Board Examinations were practising schoolmasters and schoolmistresses. There was even, then, some difficulty in recruiting university teachers to join in this work. Oddly enough, there had been difficulties in obtaining the services of schoolteachers in the 1920s, and it has been stated that the Northern Board, at least, was then more willing to involve teachers in examining than were the teachers' associations themselves.

A detailed account of the part played by teachers in the work of the Cambridge Local Examinations Syndicate was given in the 100th Annual Report of that body in 1958. As the General Certificate Examinations formed but one part of the Syndicate's work, a School Examinations Committee was established to control this aspect. Power was thus delegated by the university body to a committee which in 1958 consisted of two headmasters, two headmistresses, two assistant masters, two assistant mistresses, and three local education authority officers, all appointed by their associations. A chairman was appointed by the Syndicate, together with five other university, and two other school nominees. The headmaster of a technical school was coopted to complete the Committee. Subject committees carried out much of the detailed work of controlling the examinations. 124 schoolteachers were involved in this, in 1958, together with only 57 university, training college or technical college lecturers, giving an indication of the true extent of teachers' participation in their own affairs.[4]

Methods of teacher-representation and control varied from one board to another. Thus, teachers, local authorities and university departments at Bristol sent representatives to an annual conference to discuss the examination in detail.[5] Elected teachers' representatives from the participating schools joined with university members on standing committees in each subject at Durham, and an annual conference was held.[6] Even the apparently conservative Oxford and Cambridge Joint

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[1] *The Higher School Certificate Examination*, 1937, p. 59.

[2] Ibid. p. 30.

[3] J. A. Petch: *Fifty Years of Examining*, pp. 126–28.

[4] University of Cambridge Local Examinations Syndicate. One Hundredth Annual Report to the University, 29 May 1958, p. 5.

[5] University of Bristol. General Regulations and Syllabus governing the General Certificate of Education to be held in 1952, p. 3.

[6] University of Durham Schools Examination Board. Regulations for the Award of the General Certificate of Education, 1951, p. 4.

Board conferred with the four secondary teachers' associations, and arranged for subject discussions as well.[1] Similar arrangements were made by the other boards.[2]

Potentially, the use of teachers' estimates of success was a strong device for helping the schools to control examinations. In 1960, the Southern Board claimed to pay greater attention to estimates than was usual.[3] It was stated in 1962, however, that while most boards collected the estimates and paid lip-service to the principles involved, little use was made of them in practice.[4] The chief examiners in each subject often had a considerable amount of discretion in this respect.

Effective as distinct from formal control by the teachers of the examinations of university origin has its analogy in the sphere of personal finance. It is sometimes suggested, in a tax-ridden age, that what ensures material comfort is the use of wealth rather than its possession. Hire-purchase and the expense account are the logical consequences of such a philosophy. In education, teachers and other interested parties gained a say in determining the curriculum of their schools by helping to arrange the examinations, and it was natural that they should seize effective control to an even greater degree. The control was effective rather than theoretical because, in general, power lay ultimately in the hands of the university examining bodies.

By the 1960s the G.C.E. examining bodies were vast organizations. More than 2,000 assistant examiners were then involved in each summer examination of the London board alone, two-thirds of those at O level and one-half of those at A level being practising teachers.[5] Advisory panels for each subject were composed of representatives of the relevant teachers' organizations, and it would have been foolish to state that teachers did not participate very fully in the work, though it should be mentioned that the scale of operations demanded a quite impersonal touch. In the flush of enthusiasm for the new C.S.E. examinations it was easy to criticize the G.C.E. examinations for being remote from the schools, but it could be pointed out by the Secretary of the London University Entrance and School Examinations Council that few teachers could improve upon the existing syllabuses.[6] Nor was much use being made of the option available to teachers of offering a special syllabus appropriate to their school. Out of 1,600 schools being examined by the London board, and offering about 10 subjects each, only 10 special subject papers were submitted in one year. The Northern board had 11 such special syllabuses. It might well be asked whether the encouragement of local initiative, at school level, which was the strong point in favour of the C.S.E. movement, would flourish when it had failed in the G.C.E. schemes.

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[1] Oxford and Cambridge Schools Examinations Board. Regulations for Certificate Examinations for the Year 1951, p. 3.

[2] *The Educational Work of the I.A.A.M.*, 1954, pp. 8–9.

[3] *The Times Educational Supplement*, 1 April 1960, p. 664.

[4] E. L. Black: 'The Marking of G.C.E. Scripts,' p. 61. *British Journal of Educational Studies*, Vol. xi, November 1962.

[5] *The Times Educational Supplement*, 1 May 1964, p. 1156; G. Bruce: 'The Same Old Rose? A Harder Look at the C.S.E.'

[6] Ibid.

It was easy to overlook the good points of the G.C.E.; for example, it provided a stabilizing element in a fluid situation, for many schools suffered from a rapid turnover of staff. There was, however, a danger that examination might falsely become one of the chief aims of a school education, and teachers had too long conditioned themselves to accepting the examinations as they were. Facilities for constructive criticism were available, but were distant from the classroom. It is probable that fundamental administrative arrangements tended to discourage teachers participating more actively in the G.C.E., despite protestations to the contrary on the part of examining boards, and despite their earnest endeavours. Hope for the fuller success of the C.S.E. schemes lay in their different origins: initiative here was to come from below and not from above, or from within rather than from without.

The Eighth Report of the Secondary School Examinations Council was devoted entirely to the examining of English language.[1] The lack of teachers capable of developing pupils' powers of expression in modern English may have contributed to the weak use of English noticeable in the sixth forms; perhaps it was merely that electronics were rendering it less vital to communicate in written English. For whatever reason, the Ordinary level English examination was now criticized and all but abolished. Many employers required a pass in this subject, and unselective mass entry for this most popular paper was but one of the difficulties. Examination techniques were commonly practised in schools, so damaging interest in the subject, and the actual methods of examining provided a field ripe for scientific development and improvement. There was frequently little relation between the interests or experience of the candidates and the type of question, and there were many more technical criticisms in addition.[2] The Examinations Council urged that the abolition of the G.C.E. O level examination in English language be considered again when the C.S.E. examining bodies had developed. The approach of the latter bodies was likely to be more appropriate for many of the pupils and, with it, teachers could have the chance of generating their own examinations. The Examinations Council's proposal that experiments be carried out with externally supervised internal school G.C.E. examinations was given in the same spirit.[3] It was clear that the Council intended to await developments, having laid down general principles. It was hoped that experiments would be undertaken by schools and examining boards to act as growing points which might later influence the whole complicated school examining system.

The Northern Universities Joint Matriculation Board had earned something of a reputation for experiment, and it was characteristic that it should soon be involved in a scheme of this sort. Six schools in Leeds were to assess the standard of English of some of their pupils without using an external examination syllabus or question paper.[4] The Northern Board was to award O level passes on the results of the school work, where appropriate.

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[1] *Department of Education and Science. The Examining of English Language. Eighth Report of the Secondary School Examinations Council*, 1964.

[2] Ibid. pp. 9–13.

[3] Ibid. p. 17.

[4] *The Times Educational Supplement*, 24 July 1964, p. 143.

The Cambridge Local Examinations Syndicate introduced an alternative mathematics syllabus for weaker candidates after 1942, with less formal geometry and more up-to-date topics, including, for example, navigation, then popular because of the Air Training Corps.[1] The idea of a less rigid distinction between arithmetic, algebra, geometry and trigonometry, rapidly gained favour in certain circles, and when representatives of the secondary school examinations boards met, on 29 September 1943, a committee was appointed to redraft a suitable syllabus.[2] The boards shared little common practice in examining the subject, but the Committee, known by the name of its Chairman, G. B. Jeffery, was to make suggestions which were to have far-reaching results in all schools.[3] Two alternative syllabuses, 'A' and 'B', persisted as late as the 1960s in most examining boards' prospectuses, with syllabus 'B' having the more modern approach. The Mathematical Association, the principal organization of mathematics teachers, played an important part in promoting this at the committee level. The schools could be accused of conservatism here, for it was only in 1962 that the numbers taking Syllabus B exceeded those taking Syllabus A in the Northern Board's Scheme.[4]

A fresh concern about the teaching of mathematics became apparent in the late 1950s, first in America, and later in England. Axiomatic algebraic work gained importance, while Euclidean geometry continued to lose favour. Lengthy calculations were to become less vital in an age of computers, while pattern, symmetry and order gained significance. Conferences were held at Oxford in 1957, and at Liverpool in 1959, to bring together mathematicians from schools, universities and industry. A concrete result was only to emerge after a third conference held at Southampton in 1961, upon the initiative of the newly-appointed Professor Bryan Thwaites.[5] The School Mathematics Project was designed to put into practice some of the ideas voiced at this conference.

It was realized that school syllabuses were now in need of radical revision, and that the schools found this impossible without there being suitable G.C.E. papers. It was realized, too, that it was not necessarily the function of the examining boards to introduce such papers. It was therefore decided to form a research project, centred at Southampton University, to evolve new mathematics syllabuses for secondary schools. Eight schools participated originally, ranging in type from the public schools of Winchester and Marlborough to the comprehensive Holloway School. Textbooks were to be constructed in the course of the project, with examinations first at Ordinary level from July 1964, onwards, and then at Advanced level. It was expected that the Cambridge, London, and Oxford and Cambridge examining boards would cooperate to recognize the common examinations on the revolutionary syllabuses.[1] The idea was one stage beyond that of merely allowing schools to submit their own special syllabuses, and there was heavy emphasis on allowing these to be developed as the practical outcome of classroom experience rather than as the result of theoretical discussions round committee tables. The likely consequences of such initiative were remarkable, for it was shown possible for practising teachers to rejuvenate a conservative system of examinations by working in conjunction with university mathematicians. There was something to be said, after all, for the flexibility of a system of examining boards which allowed a responsible group of teachers and outside reformers to determine the curriculum of their schools in such a way. Forty-one schools were associated with the Southampton Project by 1963.[2]

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[1] *Mathematical Gazette*, XXVIII, No. 281, October 1944, p. 126.

[2] Ibid. p. 127.

[3] *School Certificate Mathematics* (G. B. Jeffery, Chairman). *The Report of a Conference of Representatives of the Examining Bodies and Teachers' Associations, with a Suggested Alternative Syllabus and Specimen Papers*, 1944.

[4] *Joint Matriculation Board. 59th Annual Report*, 1963, p. 11.

[5] On Teaching Mathematics. An Outcome of Discussions and Lectures at the Southampton Mathematical Conference under the Chairmanship of Bryan Thwaites, 1961.

At least one other pilot scheme was planned in the early 1960s with similar aims to that at Southampton.[3] The Midlands Mathematical Experiment, as it was to be called, was to present a syllabus and specimen papers for approval to the Northern Board in 1964–65, and seven schools were involved originally. A level and C.S.E. syllabuses were also envisaged later.[4] One or two other schools set papers on their own special syllabuses. Thus, St Dunstan's College, Catford, had its syllabus approved by the Oxford and Cambridge Joint Board for examinations beginning in 1964, and several other schools showed signs of wishing to participate.[5] There were indications by 1964 that several of the examining boards were about to introduce modern mathematics papers of their own.

It was significant that there were weighty reforms in mathematics in the 1960s, for this was a rapidly expanding discipline. There was similar news in scientific subjects generally. By 1954 the Science Masters' Association, together with the Incorporated Association of Assistant Masters, had started work on a complete revision of the teaching of science.[6] These could press their views on the examining bodies, calling for objective testing, for example, with some success.[7] The Science Masters' Association and the Association of Women Science Teachers produced 'ideal' syllabuses, first in biology in 1961 and then, a year later, in physics and chemistry.[8] The effect on the examining boards was noticeable. By 1961 the Oxford and Cambridge Joint Board had invited representatives of the examining bodies to join them in discussing a new approach to Advanced level physics, with members of the Science Masters' Association.[9] A parallel conference was arranged for chemistry on the initiative of the Northern Board. This board was taking part in experiments to introduce a 'modern physics' course at Ordinary level, in collaboration with other examining bodies. Other subjects were being reviewed as well, though the chemistry and physics syllabuses were the ones most in need of re-thinking.[1] It is clear that, if the Northern body may be considered typical, the examining boards felt themselves capable of keeping their syllabuses under continuous review. Most boards did, in fact, revise their syllabuses in the 1960s.[2]

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[1] The School Mathematics Project. Director's Report, 1961–62, pp. 2–3.

[2] The School Mathematics Project. Director's Report, 1962–63, p. 11.

[3] C. Hope: 'A New O Level Syllabus in Mathematics.' *Mathematics Teaching*, Spring 1963, pp. 36–41.

[4] Midlands Mathematical Experiment Report. 1962–63, p. 8.

[5] *The Times Educational Supplement*, 28 June 1963, p. 1413; G. Matthews: 'The New Mathematics'.

[6] *The Educational Work of the I.A.A.M.*, 1954, p. 8.

[7] Joint Committee of the Incorporated Association of Assistant Masters and the Science Masters' Association. *The Teaching of Science in Secondary Schools*, 1958 edn., p. 212.

[8] *Science and Education. Chemistry for Grammar Schools*, 1962. A Section of the Science and Education Report issued by the Science Masters' Association and the Association of Women Science Teachers.

[9] *Joint Matriculation Board. 58th Annual Report*, 1962, p. 9.

It was one thing to plan a new syllabus, but another to put it into operation. The Durham Schools Examination Board decided to produce an entirely new A level chemistry syllabus after the 1961 meeting of examining bodies at Manchester.[3] Sub-committees drafted and redrafted a new syllabus, and revised copies were sent on each occasion to schools participating in the Board's chemistry examinations. The syllabus was about to be submitted for approval to the Secondary School Examinations Council when news came of the Board's decision to terminate all its activities.

New examination syllabuses were not enough, in themselves, to bring about the reforms needed for science teaching. The Nuffield Foundation sponsored an approach in depth to the subject in the early 1960s. Backed by the Ministry of Education and by numerous professional bodies, it enabled teachers' guides, class texts, laboratory notes, apparatus and visual aids of all descriptions to be tried by teachers and modified in the light of experience.[4] Teachers were to play the key part in designing a coordinated set of teaching aids, experimenting on the grand scale. The long-term aim was no less than to achieve a change of attitude in teaching, and to make possible education in its broadest sense instead of 'checking the pupils' aptitude for total recall'.[5] It followed that none of the syllabuses to be produced were to be published in isolation from the whole range of teaching material. A careful approach was to be made to preparing appropriate examination papers, with preliminary trials.[6] Examining boards would ultimately be asked to consider setting alternative papers. The Association for Science Education (formerly the Science Masters' Association and the Association of Women Science Teachers) played an important part in the work, and numerous schoolteachers were involved in it in their own classrooms.

On the whole, the schools or the schoolteachers had long played a conservative part in maintaining outdated examination syllabuses. Teachers' complaints that examinations were being arranged for the administrative convenience of examiners could too often be countered by reference to the teachers' backwardness in calling for special syllabuses.[7] Although many teachers acted as examiners, they generally acted as private persons marking in their spare time and rarely in connection with their own immediate locality. Professional bodies of teachers had, of course, played a part in examining for many years. The Incorporated Association of Assistant Masters, for example, was represented on the examining boards, and it also operated machinery for accumulating criticisms of the individual examination papers and questions, with the object of bringing these to the notice of the examining boards.[1] Other professional associations acted similarly, or in conjunction with the I.A.A.M. Thus, and through the influence of subject organizations, did teachers combine to influence the examinations.

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[1] *Joint Matriculation Board. 58th Annual Report*, p. 8.

[2] *The Times Educational Supplement*, 7 June 1963, p. 1255; J. Spice: 'Sixth Form Science'.

[3] K. B. Oldham: 'A New Advanced Level Syllabus in Chemistry'. *The School Science Review*, XLIV, No. 153, March 1963, p. 330.

[4] Nuffield Foundation Science Teaching Project. Progress Report, October 1963, p. 2.

[5] Ibid. pp. 5–6.

[6] Ibid. p. 8.

[7] *The Times Educational Supplement*, 5 June 1964, p. 1565.

Unfortunately the whole organization was so massive that schools rarely attempted to affect the machinery individually. The personal touch was lost because of the vast inertia of the mechanism, and few schools stepped out of line to introduce their own syllabuses. The way to worthwhile syllabus-reform seemed to lie in the hands of relatively small groups of subject teachers, planning and experimenting, and utilizing the framework of the recognized public examinations whenever necessary. Before this sort of development there was frequently *intention* to secure the teachers' interest and support; it was *effect* that was lacking, presumably because of some fundamental quirk of the administrative machinery.

4. INTERNAL EXAMINATIONS

Internal examinations are beyond the scope of this work, ranging, as they do, from the tests of Dr. Lancaster's monitorial schools to the 'mock Ordinary level examinations' of a twentieth-century grammar school, and from the catechisms of an early church school to the practical tests of a special school for handicapped children. Internal examinations and assessments will only be discussed where they would have acted as a substitute for external examinations or where, being externally assessed, they might have benefited from the weighty reputation of a well-known institution. School records, objective tests, and systematic internal examinations gained importance with the years, and might at one time have replaced external examinations if only one stream of thought had gained a little more influence.

The matter was discussed in 1906, when the Consultative Committee of the Board of Education considered the functions of examinations in higher elementary schools.[2] The Committee decided that external examinations at the end of a course were unsuitable in such schools. Amongst other reasons, the existing 'Preliminary' and 'Junior' examinations set by examining bodies for pupils of this age were designed for those in mid-course, and not for school leavers. A stronger reason for shunning their use was their undesirable influence upon the curriculum. School records were preferred, with close contact being maintained with the employers for the benefit of school leavers. This was to be a recurring theme in years to come.

The Consultative Committee's Report in 1911, it has been shown, echoed this principle for secondary school children who left before they were old enough to sit an examination at the age of sixteen. It was also recommended that school records should be considered when awarding the School Certificate for borderline cases, and that endorsements be added to the certificates of those who had distinguished themselves academically at school. Little came from these proposals, which were made cautiously.[1]

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[1] *The Educational Work of the I.A.A.M.*, 1954, pp. 8–10.

[2] *Report of the Consultative Committee upon Questions Affecting Higher Elementary Schools*, 1906, p. 50.

The educational writings of Whitehead became fashionable between the Wars, and many would have agreed with his statement that 'the first requisite for educational reform is the school as a unit with its approved curriculum based on its own needs and evolved by its own staff'.[2] In practice, the schools were generally content to rely upon the curricula determined for them by the examining boards. The difficulties of securing a working compromise between internal and external examinations weighed too heavily to permit the realization of what might have been the means of achieving freedom for secondary schools. Fear of matriculation exemption being separated once more from the School Certificate Examination in the event of new, internal, tests was sufficient to quell wouldbe reformers.[3] Internal examinations there were in the secondary schools, but they remained in embryonic form, being scarcely visible from without. They were a matter of small importance when compared with the School and Higher Certificate Examinations.

The situation in the elementary school system was rather different, for central schools and senior departments were being developed between the Wars. Official opinion tended to frown upon central school children taking external examinations of any sort, though examinations such as those of the Royal Society of Arts in single subjects were tolerated.[4] It was feared that examinations of any sort might tend to deflect the energies of the school from their proper goal. Examinations were wrong if they affected the curriculum, and closer contacts with employers were urged so as to render external testing unnecessary. There was some difference between practice in schools and the theories of the educationists, which was to persist.

In 1937, Sir Philip Hartog was in favour of supplementing each School Certificate with a cumulative school record, and he referred to experiments being carried out by the Kent and Wiltshire County Councils to develop the idea of school records.[5] The possibilities of utilizing standardized intelligence and objective tests within the schools for this purpose were under review at the time. It was hoped to find some way of circumventing the dangers of personal favouritism or antagonism on the part of the teachers in assessing their pupils' abilities, and to overcome the different standards of marking between teachers. Informed opinion had come some way by this time, for Hartog was proposing that cumulative records be used, not as an expedient, but because continuous assessment was something of value in itself.

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[1] Cd. 6004, pp. 118–19.

[2] A. N. Whitehead: *The Aims of Education, and Other Essays*, 1932, p. 21.

[3] *The Journal of Education*, January 1930, p. 24.

[4] Sir P. Nunn: 'The "Break at Eleven" and the Senior School.' *The Year Book of Education*, 1932, p. 151.

[5] Sir P. Hartog: *Secondary School Examinations and the Curricula of Secondary Schools, with Suggestions for Reform*, 1937, pp. 25–26.

Information of the pupils' abilities, gathered by the teachers in a scientifically approved manner, was felt likely to be at least a useful supplement to a bare examination mark. The full use of such methods as these would, of course, have put the teachers in a very strong position, had they been carried out.

Reaction against external examinations led to Cyril Norwood, the Headmaster of Harrow School, stating in the late 1920s that no child under the age of fifteen should be subjected to them.[1] But it was with the Norwood Report of 1943 that the use of internal examinations came to be advocated in a full-blooded manner. There had been criticisms of the School Certificate Examinations dominating the curriculum, of teachers concentrating exclusively upon examination work, and of pupils minimizing the value of work which was not examined.[2] The schools were said to be relying too fully upon external examinations, and allowing these to provide the stimulus to exertion which should have come from other sources. It was felt that examinations, though necessary, should play a subordinate part in the school economy, and that formal examination should be only one element of a comprehensive survey of a child's abilities. It was stated that, ideally, examinations should be conducted by the teachers themselves, 'as being those who should know their pupils' work and ought therefore to be those best able to form a judgement on it'.[3] 'Child-centredness' was to be the catchphrase. The Norwood Committee felt that the teachers would benefit from their new freedom and responsibility, and from the interest generated. This, in turn, would influence their own status in society for the better.

Another argument concerned the nature of the external examinations which, it was explained, reflected university entrance standards. It was urged that teachers should take over the First Examination, leaving the universities to select their own candidates at the level of the Second Examination.[4] One of the dangers of the existing system was that it marked off the grammar schools from the other schools, and it was felt that internal examinations could render parity easier to attain between post-primary schools.

It was not intended that such an ideally autonomous system should be established at once: negotiations would be necessary, and time was needed to gain experience. It was proposed that the existing university examining bodies should continue to carry out the School Certificate Examinations, but that these should be conducted by standing committees similar to that of the Cambridge Syndicate described earlier, though with four H.M. Inspectors to act as assessors. Eight teachers, four local education authority representatives, and four university members were to sit on such a committee, which was to report both to the Secondary School Examinations Council and to its examining body.[5] It was hoped to encourage schools to offer their own syllabuses and, in any case, syllabuses needed lightening. The Norwood Committee wished pupils to have passes registered in single subjects and at several levels. At the end of an experimental period of seven years it would be necessary to decide whether to make the examination wholly internal or whether to prolong the transitional period. The General Certificate of Education, which finally emerged in 1951, gained such prestige that it became as solid a feature of the educational scene as its predecessor.

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[1] Terry Thomas: 'The First Examination', *The Nineteenth Century*, May 1929, p. 680.

[2] *Curriculum and Examinations in Secondary Schools*, 1943, p. 31.

[3] Ibid. p. 45.

[4] Ibid. p. 46.

[5] Ibid. pp. 46–48.

The necessity of continuing research into the best methods of keeping school records on a larger scale was fully realized, for it was mainly upon this information that the full use of internal examinations could be made. The validity of these and other methods would determine the public reaction to them, and confidence in the teachers' ability to do the job properly was one of the main issues raised by the proposals. It was, perhaps, the implication in the Report that teachers would have to cooperate in the matter of examinations under the supervision of the Board of Education or of the local authorities, which determined the teachers' lack of enthusiasm. The demands in the Report for a greatly strengthened inspectorate were likely to alarm those who feared for the freedom of teachers within their schools.[1]

The proposed certificate was to be very similar to that suggested by Hartog in 1937. It was to be divided into two parts, one in the form of a school record, the other giving the results of the examination at the end of the school course. The examinations would be external throughout the transitional period, but would ultimately become internal as public confidence in the schools increased.[2]

The 1944 Education Act formally accentuated the wish for a 'child-centred' education, and the Ministry Regulations which followed virtually obliged schools to keep school records for each child. Thus, it was laid down that, 'whenever a pupil ceases to attend a school and becomes a pupil at some other school . . . particulars of his medical and educational records shall be supplied to that other school'.[3] Alice Walker has shown that the bulk of school record systems dated from the 1945–47 period.[4] The Ministry of Education recommended cumulative records specifically, and especially for allocation or selection procedures.[5] Systematic records were, nevertheless, only being collected for between fifty and seventy per cent of children in maintained schools in the 1950s, and much of the interest centred on allocation to secondary schools rather than on secondary school-leaving certificates.[6]

The 1947 Report of the Secondary School Examinations Council favoured external examinations only for those university entrants and budding professional people who had stayed on at school beyond the statutory leaving age.[7] It was proposed that the Ministry and local authorities should promote and encourage experiments in the conduct and assessment of internal examinations for the majority leaving at the age of fifteen. Possible methods suggested were the association of teachers from neighbouring schools and areas for the setting and marking of papers, and the external assessment on wider lines by appropriate organizations. The use of periodic examinations within the schools, of objective tests of various kinds, and of cumulative school records, all demanded attention and experiment. Such ideas occupied much of the Report, though they were only to be carried out partially in practice. The Examinations Council noted that external examinations might continue to fulfil a function, that of preserving national standards. The School Certificate, and later the Ordinary level examinations were also linked to professional entry in a way in which locally organized examinations were not. It will be shown how candidates from secondary modern schools were to strain after Ordinary level passes. Internal examinations were overshadowed, and teachers lost a chance of arranging their own affairs that was not to come again so widely before the 1960s.

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[1] *Curriculum and Examinations in Secondary Schools*, p. 48.

[2] Ibid.

[3] 1945 Statutory Rules and Orders. Ministry of Education Grant Regulations No. 2, Section 9.

[4] A. S. Walker: *Pupils' School Records*, 1955, pp. 2–3.

[5] Ministry of Education Circular 151, 18 July 1947. School Records of Individual Development.

[6] A. S. Walker: op. cit. p. vi.

[7] *Examinations in Secondary Schools. Report of the Secondary School Examinations Council*, 1947, p. 5.

Circular 205, in 1949, again pressed the official view that objective tests and internal examinations should be utilized as a complement to external examinations.[1] The Minister had earlier announced his intention of amending the grant regulations so that, after 1950, no child should be entered for an external examination under the age of sixteen.[2] Officially, at least, children were thus encouraged either to take the proposed local or internal examination or to stay longer at school for an external examination. The child who left school as early as possible would be forced to rely on an internal examination. There was every indication of there being only lukewarm support for internal or local examining at first, and the Minister's failure to take the initiative at a national level partly accounted for this.

Internal examinations lacked external currency, and few were known at any distance from the school concerned. G. A. Darlow has described an examination held annually at a Midland school from 1953 onwards. 53 out of 91 fourth-year boys took the examination for the 'Governors' Certificate' in 1958.[3] The low pass standard gave an incentive to effort to a greater number of pupils than was usual in similar systems, but the certificates must have been virtually worthless to an employer twenty miles away.

When D. J. Johnson, of the London University Institute of Education, wrote to local education officers in 1957 to enquire of the arrangements in secondary modern schools, very little was happening in the way of internal school-leaving examinations.[4] If tests were being carried out, this was happening informally, with no publication of syllabuses and reports. Reliance was placed upon the G.C.E. examinations, upon those of the Royal Society of Arts, and upon only a few locally organized external examinations. Thus, an education officer wrote of some experiments in Middlesex, but declared that there were none in his borough. Officers of most of the excepted districts in Middlesex, and of the counties of Kent, Surrey,

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[1] Circular 205, 6 September 1949.

[2] Circular 168, 23 April 1948. *Examinations in Secondary Schools.*

[3] *Education*, Vol. 112, 13 June 1958, p. 1125.

[4] University of London Institute of Education; Teachers' Centre Archives, 1957.

Essex and Hertfordshire, wrote to the same effect. Some slight evidence of formal internal examining came from two schools, one in Tottenham and one in Enfield. Examining at this level, however, could scarcely be said to have gripped the imagination of teachers in the Home Counties; and the teachers' attitudes reflected the pressures of parents, pupils and employers.

A means of attaching some importance to the results of internal school examinations was found in Cheshire. It was arranged for these to exempt pupils from certain recognized external examinations normally taken at evening institutes. School staff submitted question papers to the principal of the local college of further education. The papers were marked at school, but moderated at the college to ensure a common standard of marking. Certificates were issued by each school, indicating the pupils' ability to enter an institute of further education at an appropriate level, for example at S.1. Mechanical Engineering (National Certificate) level. The papers were to serve for admission purposes to the college, as well as being leaving examinations for the schools. It was explained that the main purpose of having a school-leaving certificate for secondary modern school children was that there should be an incentive for the child.[1] A standard form of certificate was suggested, with five possible grades of performance in each subject, and with room for comments on the part played by the child in school life.

The balance of power in such an examination system had to be calculated nicely. Activity in the sphere of locally organized examinations deserves a section to itself.

5. THE GENERAL CERTIFICATE OF EDUCATION AND THE SECONDARY MODERN SCHOOLS

Only a small number of candidates entered for the School Certificate from central and other non-grammar schools in the years before 1951.[2] The numbers sitting for the G.C.E. had grown to rather more than 5,500 from 357 modern schools by 1954.[3] The Ministerial dilemma before 1955 invited sympathy. On the one hand, Curzon Street was committed to a policy of encouraging local or internal examinations, and discouraging external examinations for the modern schools on educational grounds. On the other hand, the Minister was anxious to have it known that no pupil would be deprived of the opportunity of entering for the General Certificate of Education by an inaccurate or inadequate selection process at the age of eleven.[4]

The dangers of having such an external examination in the modern schools were obvious enough. There were fears of sacrificing the interests of the majority to those of the few for reasons of prestige. External examinations tended to have a restricting effect and, being designed for an ability range markedly above that of all but the minority of modern school children, the G.C.E. would have given an unrealistic index of the efficiency of a school.[5]

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[1] Cheshire Education Committee: *Incentives, External Examinations, School Leaving Certificates and the Secondary Modern School Pupil's Record Card*, 1958.

[2] N.U.J.M.B.: *Secondary Modern Schools and the General Certificate of Education*, 1955, p. 2.

[3] Circular 289, 9 July 1955, Section 3.

[4] Ibid.

[5] Ibid. Sections 4–6.

The Minister refused to slacken the Ordinary level standard or to institute a lower examination. He indicated that opportunity for the abler pupils might be increased by transferring them to grammar schools, or by arranging for them to continue in technical colleges, as well as by taking the examinations in 'extended courses' in modern schools. The policy of the Examinations Council's Reports was thus broadly retained by the Minister in 1955, but extended courses in the modern schools leading to G.C.E. examinations were given a firm, if guarded Ministerial blessing. It was apparent from Circular 289 that the Minister wished to test opinion upon the subject of examinations generally.

The Ordinary level examinations were too difficult to enable secondary modern school children to pass comfortably in a range of subjects and, indeed, it was possible to concentrate on one or two. As more children entered for the examination, so did their average number of passes decrease. In modern schools taking the Northern Board's examination it fell from 5.7 to 4.5 between 1951 and 1954.[1] The passes of the modern school candidates were more frequently in practical 'non-academic' subjects than in English, mathematics, and the traditional subjects of the grammar school course.

The Minister stated that in 1956 over 8,500 secondary modern school pupils took the examination, from about 600 schools.[2] He referred to the substantial volume of comment relating to Circular 289, which he had now had the opportunity to assess, and remarked upon the widespread opinion that children in all types of school should be able to take the G.C.E. because it was the yardstick for entry to the universities and the professions.[3] The Advisory Council could point out, in 1959, that extended courses rendered the 11 + test less final, and so served a useful purpose in increasing opportunity.[4] The number of modern school candidates had risen to 16,787 in 1958, a substantial number of persons.[5] 68 per cent of all candidates under the age of 17 attempted six, seven, or eight subjects in that year, whereas the modern school average was only four. The modern school pass rate, on the other hand, was not so very different from the average of 59 per cent for all pupils. When the Minister was asked for an analysis of performance in 1961, he could state that no less than 21,670 modern school pupils entered for the examinations in the previous year. There were 85,050 subject entries, and 41,060 subject passes. The Minister's figures, based on a 10 per cent sample analysis, showed that the average modern school candidate took 3.9 subjects and passed in only 1.9.[6] Scorn could be poured upon such qualitatively meagre results by opponents of external examinations, though the quantity was impressive enough.[7] The Advisory Council doubted whether some of the extended courses which relied upon one or two Ordinary level subjects were properly balanced, and mentioned that commercial

[1] N.U.J.M.B.: *Secondary Modern Schools and the General Certificate of Education*, 1955, p. 4.

[2] Circular 326, 3 July 1957.

[3] Ibid. Section 1.

[4] *Report of the Central Advisory Council*, 1959, p. 76.

[5] Ibid. p. 76. Table 13.

[6] *The Times Educational Supplement*, 24 February 1961, p. 370.

[7] *Teachers' World*, 24 February 1961; 'Cinna': Viewpoint.

courses for girls were frequently lacking in this respect.[1] Only the largest modern schools could offer economic G.C.E. courses, because of the small proportion of capable candidates.[2]

The emphasis that had formerly been placed upon the Ordinary level examination as a means of establishing competence in certain subjects, and in particular for securing exemption from university or professional examinations, was, in fact, changing by the 1960s. The main effective function, it could now be argued, was to provide a leaving certificate of general currency, a matter which became more obvious as the examinations became less important for university entrance.[3] Possession of the Certificate was again being regarded as a mark of educational respectability, though in the post-1951 era it might be in one subject only. The examination was unfortunately too difficult for many of those who would have liked to have taken it and doubts were even cast upon its suitability for the weaker grammar school candidates.[4]

The examination could be scarcely described as an ideal one for secondary modern school pupils in general, and one of the main reasons for suffering it was that it served to raise morale, a fact admitted by some though glossed over by others. Thus, the Headmistress of Priory Girls' Secondary Modern School in Acton could describe the G.C.E. enthusiastically as a social symbol, and one which helped to wipe out the sense of failure at the age of eleven plus.[5] She stated that it was the parents who worried about the eleven plus selection, and who were chiefly concerned with extending education beyond the minimum. She referred to the difference in morale between young grammar school and young modern school children, and felt that the existence of the opportunity for taking the external examination had a steadying effect upon the latter.

The teachers too, it may be suspected, gained somewhat in morale from their pupils taking examinations. Head teachers could write proudly to *The Times Educational Supplement*, giving their views on extended courses and demonstrating that their own school's results were slightly above the average.[6] The facts that only seven or eight candidates were taking the examination each year, and that special classes were uneconomical in a period when teachers were scarce, were set to one side.

The pitifully small number of passes deemed worthy of mention emphasized the difficulties experienced by modern schools in broadening their pupils' opportunities. In one county, at least, such courses were discontinued.[7] A promised course in Oxfordshire was cancelled because of the teacher shortage, and a strike of pupils resulted.[8] Indirect benefits to the schools, such as the raising of morale, or the provision of mature children to act as prefects, gave stronger reasons for maintaining uneconomical courses than the benefits to a small number of individuals.

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[1] *Report of the Central Advisory Council*, 1959, p. 77.

[2] Ibid. p. 79.

[3] N.U.T. Policy Statement. *The G.C.E. O Level. Should it be reformed?* 1961.

[4] *The Times Educational Supplement*, 1 January 1960, p. 15.

[5] *The Times Educational Supplement*, 3 July 1959, p. 15.

[6] *The Times Educational Supplement*, 8 May 1959, p. 826; 'Transfer at 16 Plus'.

[7] *The Times Educational Supplement*, 11 March 1960, p. 494.

[8] *The Times Educational Supplement*, 18 March 1960, p. 525.

It would be wrong to leave the impression that there were no schools offering an economical and sound education. As early as 1958 one of the modern schools in the Brockenhurst area of Hampshire sent 20 pupils to the grammar school after each had successfully taken five or more Ordinary level subjects.[1] Such results compared very favourably with those from the bottom forms of the grammar school. Many children in Croydon remained in their modern schools after the age of sixteen to take the G.C.E. or another external examination: there were 467 such pupils in the area in 1958.[2] Arrangements were made at Burton-on-Trent to link the modern schools with the local technical college to provide an Ordinary level course, four years being spent at the former and two at the latter.[3] Specially biased fifth-year Ordinary level courses in crafts, in sciences, or in commercial work, for example, were proposed for schools in Oxford in 1962, one type of course to be concentrated at each secondary school to ensure economy in the use of specialist teachers.[4]

Ways of increasing educational opportunity, although perhaps open to criticism in some districts, were therefore worthwhile in others. Thus 31.7 per cent of the total number of pupils in East Sussex gaining a G.C.E. were modern school candidates, of whom nearly half had passes in three or more subjects.[5] Opportunity in this one area had thus been extended to about 175 deserving children, from whom it would otherwise have been withheld. In 1962 the Minister of Education could congratulate the local education authority at Bournemouth on having abolished the neurosis about the eleven plus examination.[6] The new school that he was opening, like others already operating, was planned to give an education up to Ordinary level. The number of successful G.C.E. candidates entering one Hertfordshire grammar school sixth form from secondary modern schools in 1963 had grown to over thirty.[7]

The test of success was likely to be whether or not the less able children of professional men eventually entered the modern schools, their parents appreciating the value of the education to be obtained there.[8] In 1959 few of the children of the local doctor, the bank manager, or the grammar school headmaster, were to be found in modern schools when they had 'failed the eleven plus'. Their parents removed them to private schools, where they paid for their education. A correspondent in *The Times Educational Supplement* argued that professional families expected formal education to continue until eighteen, at least, and that often the modern school system had rendered this impossible for them. The contribution that such children, and their families, would have made to the life of the school was being lost, and the modern schools suffered accordingly.[1] Disciplinary problems and standards of behaviour were linked with the absence of children from the better-educated families. The possibility of lengthening education, and enriching it by means of extended courses was seen by some as a means of making state-provided education more attractive to the professional classes, and thus of raising the general standard of the schools.

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[1] *The Times Educational Supplement*, 27 February 1959, p. 341; L. R. Wood: 'Over into the Sixth'.

[2] *The Times Educational Supplement*, 5 December 1958, p. 1754.

[3] *The Times Educational Supplement*, 24 April 1959, p. 705.

[4] *The Times Educational Supplement*, 6 July 1962, p. 15.

[5] *The Times Educational Supplement*, 9 October 1959, p. 404.

[6] *The Times Educational Supplement*, 15 May 1962, p. 894.

[7] Cheshunt Grammar School Records: 1963 entrants.

[8] *The Times Educational Supplement*, 7 August 1959, p. 143.

6. LOCAL EXAMINATIONS ORGANIZED BY TEACHERS

Teachers played an ever-increasing part in the organization of examinations for their own schools in the course of the century, quite apart from their internal school examinations work. The trend towards self-control was a gradual one, all the more so since employers proved to place greater reliance upon well-known external examinations than upon a school's records and tests, or upon a small local examination.[2] It was only a matter of time before teachers and local administrators began to combine to form their own examining bodies of some significance and standing, but sufficiently local to enable control to be maintained by serving teachers themselves. The Norwood Committee had pointed in this direction. As far as the secondary modern schools were concerned, similar arrangements at a suitable level began to appear in the 1950s.

It would be wrong to ignore at this stage the plans of the Consultative Committee which were published in 1926. The higher elementary schools of the 1906 Report were to have purely internal examinations, but it had come to be realized twenty years later that external examinations were expedient. The majority of the witnesses in the 1926 Report were against having external examinations on educational grounds, because of the effect on the curriculum and because children below the age of 16 were too immature to give a fair result in an examination.[3] Many felt, however, that individual scholars from central schools and evening classes should be able to enter for external examinations. The School Certificate examinations were mentioned, together with those of the London Chamber of Commerce, the Royal Society of Arts, the College of Preceptors, the East Midland Educational Union, and the Union of Lancashire and Cheshire Institutes. The Consultative Committee favoured the introduction of a new examination for fifteen-year-olds, partly to encourage children to stay at school up to that age.[4] The existing examinations all appeared to be too literary or too restricted in scope; the new ones were to be designed by teachers for their pupils.[5]

It was proposed that the presentation of children for such new, special, leaving examinations should be wholly optional, both in respect of the individual pupil and of the school as a whole.[6] The voluntary nature of the examination was strongly emphasized. Organizations were not expected to be established for some three years at least, as the conception of the modern or senior school had yet to be developed, and little actually happened in the way of examining them between the Wars.

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[1] *The Times Educational Supplement*, 7 August 1959, p. 143.

[2] *Report of the Consultative Committee on the Education of the Adolescent*, 1926, pp. 150–51.

[3] Ibid. pp. 150–52.

[4] Ibid. p. 153.

[5] Ibid. p. 87.

[6] Ibid. p. 153.

The means of organizing the examinations were of prime importance. The Consultative Committee advocated the formation of a number of joint boards in different districts, consisting mainly of representatives of the local authorities, the universities and of the various grades of teacher. It was suggested that the Board of Education should help to initiate these boards. Methods of assessing non-academic subjects, and of arranging for an appropriate endorsement on the certificate were considered.

The leaving age was fourteen in 1926, and for those who did not elect to stay the extra year, internal school certificates were felt to be the answer, signed by the head teacher and by the local director of education. Little came of these ideas before the War because the 'Hadow reorganization', which was to separate the senior from the junior schools, was somewhat delayed.

The Joint Committee of the Association of Education Committees and the National Union of Teachers which reported upon *Examinations in Public Elementary Schools* in 1930, recommended that internal examining be made compulsory in all schools.[1] The cautious approach to external examining was in strong contrast to this. Special leaving examinations for central and senior schools were felt to be dangerous because they tended to create false values in the public mind.[2] It was pointed out, too, that even examinations for which entry was optional became more significant with the passage of time, so that they became compulsory in practice because of the pressure of public demand. External examinations were dangerous because they affected the curriculum.

Local examinations existed in the 1930s, but they were arranged externally, and not usually by the schoolteachers. There were, for example, examinations at various levels at Portsmouth, leading to entry to the junior technical colleges, the municipal college, and to junior clerkships in the municipal services; similar instances abounded in other areas.[3]

An examination arranged by the East Midland Educational Union from 1927 onwards for central school children was very similar to that proposed by the Consultative Committee in the previous year.[4] This regional body catered for 220 candidates from seven schools or departments originally; 722 were involved from 38 departments by 1938. A decline followed, and postwar attitudes resulted in the examination being terminated in 1949. Teachers sat on the Central Schools Examinations Committee, and were involved in the setting of the papers, though this type of regional body was essentially an organization of local authority representatives. It was, then, external to the schools. A very similar arrangement was made by the Union of Educational Institutions after 1941, for technical as well as for commercial schools.[1] Manchester's scheme of examination for central schools will be mentioned later, for it scarcely involved the schoolteachers themselves.

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[1] *Examinations in Public Elementary Schools. Report of a Joint Committee of the A.E.C. and the N.U.T.*, 1930, pp. 76 ff.

[2] Ibid. p. 225.

[3] International Institute Examinations Enquiry: *A Conspectus of Examinations*, 1937, p. 8.

[4] East Midland Educational Union. Secondary School Certificate Regulations and Syllabus, 1963, p. 2.

Only three other local authorities in this prewar period appeared to conduct external or modified internal examinations in the final year of school life. Carlisle's 'Senior Merit Examination' enabled successful candidates to take free places at the local evening schools, and was attempted by nearly all school leavers. A similar examination at Sheffield was in no sense obligatory. Dorset's alone was compulsory.[2]

The raising of the school leaving age to fifteen affected examinations in the secondary schools. Whereas those able to take the examinations at that age had once been the exceptions, now all remained at school and were free to sit for a test. Unfortunately, not all children completed the full fourth-year course as they were initially permitted to leave at the end of the term in which they became fifteen. Raising the leaving age did, however, encourage pupils to take examinations at the end of the course. Locally organized examinations were not to be found in all districts, for, by 1960, only about 30 of the 146 local education authorities could claim to have any schools conducting internal examinations which led to some form of certificate, and another 35 that they had schools taking examinations which involved some form of external assessment.[3] The 'Hadow reorganization' was being continued with the widespread construction of modern schools following the 1944 Education Act, but relatively little attention was paid to locally organized examining at this stage, despite central encouragement. Pupils were entered for the external examinations of regional or national organizations such as the College of Preceptors, rather than for local ones.[4]

Local examinations did begin to take root in the 1950s. Modern schools were beginning to establish themselves, and there was a considerable demand for paper qualifications at this level. The Harrow Schools Leaving Certificate was first awarded in 1954 for the abler pupils who stayed to the age of sixteen.[5] Some of these pupils also sat for the G.C.E., and the majority entered industry or commerce either directly or by way of the technical college. The local technical college was prepared to admit those with the appropriate subject passes to its S.1. National Certificate course.[6] Class-work over the two final school years was taken into account besides examination performance; the papers themselves were mainly set and marked by the individual schools, but externally moderated, and the whole was managed effectively by teachers. The local technical college was represented on the controlling council, as were the borough and county education officers and the local employers; an H.M. Inspector attended as an observer. Two teachers and two heads of schools sat on the council, and there were three coopted members.[1]

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[1] Union of Educational Institutions. Secondary School Certificate Regulations and Syllabus, 1961, p. 2.

[2] *Examinations in Public Elementary Schools*, 1930, p. 222.

[3] *Secondary School Examinations Other than the G.C.E. 1960. The Report of a Committee Appointed by the Secondary School Examinations Council in July 1958*, p. 12.

[4] Ibid. pp. 13 ff.

[5] Harrow Schools Leaving Certificate, Summary of Scheme. W. H. J. Knight, Borough Education Officer, November 1957.

[6] *The Times Educational Supplement*, 23 February 1962, p. 343; F. D. Bailey: 'A Local Examination'.

Another type of examination was arranged to begin at Southend in 1957, after a trial run in the previous year.[2] This was for fifteen-year-olds, and proved a successful device for persuading them to stay for the full fourth year. 542 boys and girls sat for the examination out of a total of 718 in the age group who were still in the schools. 241 obtained a certificate, having passed the two 'compulsory' and two 'internal' subjects. English and arithmetic were obligatory, being externally examined. 91 of the 241 certificate holders entered full-time courses at technical colleges. The examination was in the hands of head teachers, together with the education officer.

A very similar scheme to this was arranged at Swansea from 1954 onwards, and was said to be markedly successful in raising standards, in encouraging children to stay for the full fourth year, and in attracting large numbers of candidates.[3] Local employers and further education establishments showed themselves willing to accept the certificate by 1959, and eight other Welsh local authorities had followed Swansea's lead.[4]

The Scunthorpe division of Lincolnshire set an examination for fourth year pupils in 1957, at the initiative of the head teachers who had, apparently, been inspired directly by the Ministry's Circular 289. Panels of teachers controlled each separate subject paper, and the examinations could be taken on a subject basis.[5] An exactly parallel scheme was put into operation in the neighbouring district of South-East Lindsey, where eleven schools were involved, giving an idea of the scale of the scheme.[6] Plans for a Certificate of Education at Reading were presented by the local head teachers in 1955.[7] Basic papers were to be taken by pupils from all schools in common with other papers arranged within the schools; there were to be pass and credit levels. Examining teachers were to be paid both fees and expenses. 13 schools participated, and 459 certificates were awarded in 1959.[8]

Bolton had proposed to establish a Borough Leaving Certificate in 1955, for pupils aged fifteen.[9] It was to be awarded on a school assessment of the pupils' final two years' progress, marks being given equally for English, arithmetic, attainments in other subjects, creative work, and character. A panel of head teachers was to agree upon achievements in English and arithmetic under the local secondary school supervisor, so that standards might be compared with others for a new examination of the Union of Lancashire and Cheshire Institutes.

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[1] Regulations for the Conduct of the Harrow Schools Leaving Certificate Examinations in Secondary Schools, 1957, pp. 1–2.

[2] *The Times Educational Supplement*, 25 October 1957, p. 1379.

[3] Ibid.

[4] *The Times Educational Supplement*, 4 December 1959, p. 692; 'Secondary Modern Stimulus'.

[5] Lindsey County Council, Scunthorpe Divisional Executive. *The School Leaving Certificate.* Syllabuses, 1957 and 1958.

[6] Lindsey County Council, South-East Lindsey. *The Secondary Schools' Leaving Certificate.* Syllabus, 1958.

[7] *Education.* Vol. 106, 21 October 1955, p. 669.

[8] *The Times Educational Supplement*, 8 January 1960, p. 33.

[9] *Education.* Vol. 106, 21 October 1955, p. 669.

The Keighley Certificate of Education was first issued in 1958. It was designed for fifteen-year-olds, 215 of whom sat for the examination. 116 were awarded the full certificate and 74 were given 'letters of success' for having passed only a few of the papers.[1] This was an internal examination, but externally assessed. It was to be taken by the majority of school leavers, but was to cater for the abler by credits and distinctions, and it was expected that many of these would remain at school to take the G.C.E. a year later.

Most of the locally organized examinations had a relatively low percentage of successful candidates, but not all. When the Staffordshire County Certificate was started in 1958 for fifteen-year-olds, 80 per cent of the age group were expected to pass, 50 per cent of them with credit and 10–15 per cent with distinction.[2] The schools here set their own examinations, which were externally moderated by separate subject panels of teachers. Again, in South-West Hertfordshire, 849 entered, out of 1,000 in the age group, and 716 received a certificate at the age of fifteen.[3] The examination was arranged very largely by the teachers who, it was reported, benefited greatly from the consequent exchanges of ideas. The Principal of the Watford Technical College and the Divisional Education Officer sat, with teachers, on the Examinations Council which governed this local scheme.[4]

There was a pleasing lack of uniformity about the numerous local examinations springing up in the 1950s. Some were for pupils of 15, others for those of 16 years of age; some were in urban and some in rural areas. The degree of externality and teacher-control varied from district to district, and so did the standards. The local head teachers' association in the scattered area of the Mid-Derbyshire Divisional Executive felt that the nature of the countryside made combination difficult between schools.[5] Yet it was stated elsewhere that such local arrangements were less common in the large urban areas, where teachers were in a position to exchange views regularly on professional matters. The Director of Education for Sheffield could point out that large towns such as Leeds, Leicester, Liverpool, Newcastle and Nottingham lacked a teacher-organized system, and that little had been done in Manchester or Birmingham on those lines.[6] Most of the locally organized examinations were set up by excepted districts, divisional executives and the smaller county boroughs. London County Council policy in 1956 was to discourage examinations at the age of fifteen which had any degree of externality whatsoever, while encouraging internal school certificates.[7] It may be suspected, however, that many teachers supported the idea of using such existing examinations as those of the College of Preceptors and the Royal Society of Arts, which took root early in some of the more progressive urban areas. Local organization could easily become parochial in outlook, as the College of Preceptors pointed out.[1] Local standardization might lead to loss of freedom in the classroom, and administrative work could weigh heavily on practising teachers. The College of Preceptors favoured organization on a national basis, but with ample local representation. The future of many of the examinations systems appeared cloudy, to say the least, in view of the development of the new C.S.E. examinations and of a raised school leaving age. It was to the C.S.E. that local bodies of teachers began to turn.

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[1] Report of the Keighley Certificate Examinations Board, 1958. Keighley Education Committee.

[2] *Education.* Vol. 112, 17 October 1958, p. 643.

[3] University of London Institute of Education; Teachers' Centre Archives, 1957.

[4] *A Survey of the S.W. Hertfordshire Certificate of Education, 1951–56*, pp. 2–3.

[5] *The Times Educational Supplement*, 4 December 1959, p. 692.

[6] City of Sheffield Education Committee. Reports on Examinations in Secondary Schools and Organization in Secondary Modern Schools. February 1958, p. 9.

[7] *Education.* Vol. 108, 10 August 1956, p. 178.

7. OTHER EXTERNAL EXAMINATIONS

In the absence of suitable examinations arranged locally, parents, teachers and pupils turned to the examinations of the well-known national or regional bodies. The practice of entering central school pupils for the Oxford or Cambridge Junior Local Examinations was well established by the 1930s, when these were still being used by private schools, though not by recognized grammar schools. The London County Council had to give instructions to stop this development in its own territory.[2] Between 20 per cent and 30 per cent of the successful candidates in the Oxford Junior Local Examination in 1925 had been entered by the emerging central or senior schools, so that the examination itself took on a new lease of life.[3] Such examinations had been banned from the state-aided secondary schools when the post-1917 examinations network was established. They had been designed originally for the lower forms of secondary schools, and were thus rather academic, being intended for those who were to continue their secondary education. In 1926 there was a move to adapt these examinations for central schools but nothing came of it.

The regionally organized examinations of the East Midland Educational Union have already been mentioned. Manchester Education Committee solved its own problems of examining central school pupils by starting a fourth year examination in 1929. This was marked and set internally by the schools, though checked, modified and assessed by subject panels drawn from members of the Examinations Board. This Board consisted of the principals of the twenty central schools, together with over a dozen administrative or other representatives, including four from industry and commerce and two H.M. Inspectors.[4] The formal exclusion of serving teachers from the Board and from the panels should be noted, though this could not really be described as an external examination.

The use of vocational examinations by the central schools had become widespread by 1930.[5] 'Grouped Course Examinations' arranged by the Royal Society of Arts since 1927 for evening school pupils, and also arranged by other regional bodies, were unsuited to the tasks that they were fulfilling in secondary and elementary schools. Yet they catered for a demand, and the London County Council only took steps to prevent its own schoolchildren from taking the examinations after 1960.[1] The problem of controlling the examination of the emerging senior schools was seen to be serious by 1930, when it was stated that 'unless the problem is faced in time, it may be solved or prejudiced in a premature and unwise fashion'.[2] The examinations were used more widely than ever by 1934.[3]

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[1] College of Preceptors. External Examinations for Secondary Schools, March 1956, p. 5.

[2] *Journal of Education*, January 1931, pp. 31–32.

[3] *Journal of Education*, September 1926, p. 630; H. G. Stead: 'A Leaving Examination for Central Schools'.

[4] Spurley Hey: *The Central School Examination*, 1929, pp. 9–10.

[5] *Examinations in Public Elementary Schools*, 1930, p. 212.

The situation was scarcely changed in 1950. Personal enterprise on the part of teachers, parents and children, encouraged the use of well-known external examinations. Central or local authorities had to step in to regulate their use or to suggest alternatives. At first, internal examinations and school records were felt to be the solution, but when these proved to carry insufficient weight, locally or regionally organized school examinations were put forward instead. Official disapproval of the custom of entering pupils for the type of examinations designed for part-time further education students was apparent in the 1959 Report of the Central Advisory Council.[4]

The existing external examinations intended for secondary schools were ready-made, and attractive in the absence of widespread local initiative. New ones were soon forthcoming. In 1953 the College of Preceptors added a new Certificate Examination to its long-established Senior Certificate. The new examination was to prove suitable for the fourth year, and the other for fifth year pupils in secondary modern schools.[5] The former was started at the request of private schools, but it was soon all but monopolized by candidates from the state schools.[6] The numbers shot up from 600 to 5,400 in five years, and over 21,500 entered in 1963, of whom just under 8,000 gained a full certificate.[7]

An important question was whether the Minister would bless implicitly the principle of having external examinations other than the G.C.E. The Examinations Officer of the Royal Society of Arts, sent a letter to the Minister of Education on 17 November 1954, pressing for Ministerial recognition of its examinations as being suitable for secondary schools.[8] In 1955, W. P. Alexander, of the Association of Education Committees, suggested to the National Union of Teachers that they approach the Ministry to ask for schools and local authorities to be permitted to pay fees for all examinations considered by them to be appropriate.[9] The Union declined to do so but its fear of jeopardizing the freedom of head teachers within their schools later resulted in their urging that the matter be left in the hands of individual head teachers.[1] The Minister was frequently asked to alter the grant regulation as it affected examination fees, and he refused to do so repeatedly.[2] When replying in the House of Commons on the question of general examinations in 1958, the Minister reminded his questioner that the local authorities had the discretion of paying the fees.[3] The local authorities could pay the fees indeed, but the grant regulations prevented them from paying for pupils under the age of sixteen.[4]

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[1] *R.S.A. Report on the Examinations for the Session, 1960–61*, p. 6.

[2] *Examinations in Public Elementary Schools*, 1930, p. 218.

[3] *The Selective Central School. The Report of an Enquiry conducted by the National Association of Teachers in Selective Central Schools*, 1934, pp. 70–71.

[4] *Report of the Central Advisory Council*, 1959, p. 85.

[5] A Commentary by the Council of the College of Preceptors on Secondary School Examinations Other than the G.C.E. 1961, p. 4.

[6] *The Times Educational Supplement*, 14 November 1958, p. 1650.

[7] College of Preceptors. Certificate and Senior Certificate Examinations, 1963; Report of the Examiners, p. 61.

[8] *Education*, Vol. 105, 18 February 1955, p. 318.

[9] *Education*, Vol. 105, 22 April 1955, p. 730.

Many local authorities encouraged their modern schools to use the existing external examinations. Liverpool, for example, wished its schools to have every possible freedom in choosing examinations.[5] The Cheshire Education Committee felt that examinations to be taken at the age of fifteen were unsuitable for the children, but would not interfere with the head teachers' freedom to enter pupils for them.[6] The effect, in practice, was to force parents to pay the examination fees of their underage children, a matter against the spirit if not against the letter of the Minister's policy. Children were thus entered privately by their parents while attending a school course geared to the examination.[7] No less than 94 out of the 146 local education authorities had schools entering pupils for the papers of the professional examining bodies not involved in the G.C.E. when the situation was reviewed in 1958.[8] Almost half the schools approached in a 1959 survey used such an examination.[9]

The national and regional examining boards already mentioned in connection with the birth of the Associated Examining Board were, broadly speaking, the bodies involved together with the College of Preceptors, though the City and Guilds of London did not actually have school certificate papers. Most of these bodies were strongly connected by their history to technical or further education rather than to secondary education, but many of them established certificate examinations suitable for schools in the 1950s and after.

The examinations of these influential bodies were widely known, and their use was likely to increase. The numbers of candidates for the various school examinations of four of the bodies, roughly doubled between 1958 and 1959.[10] There was every likelihood of these nationally or regionally organized examinations squeezing out the smaller local examinations that were supported officially. The larger bodies were of long standing, but they were independent of the Minister. They could dictate curricula, in practice, without reference to what he felt were the long-term needs of the schools. They were growing into a position of power, and there was no necessary guarantee that they were the best organizations for this purpose. Increasing size was likely to take them further away from the reality of the secondary school classroom. When the Committee appointed by the Secondary School Examinations Council, and known as the Beloe Committee, after its Chairman, reported in 1960, it was clear that the main issues discussed were not so much the short-term defects of the examining bodies, as the long-term consequences of their existence.[1]

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[1] *National Union of Teachers Report for 1960*, p. 78.

[2] *Parliamentary Debates*, 549, 8 March 1956, Cols. 2288–9.

[3] *Parliamentary Debates*, 592, 31 July 1958, Cols. 1565–6.

[4] Schools Grant Amending Regulations No. 3, 1952, Section 3.

[5] *Education*, Vol. 107, 27 January 1956, p. 154.

[6] Cheshire Education Committee: *Incentives, External Examinations, School Leaving Certificates and the Secondary Modern School Pupil's Record Card*, 1958, pp. 12–14.

[7] *Secondary School Examinations Other than the G.C.E., 1960. Report of a Committee Appointed by the Secondary School Examinations Council*, p. 16.

[8] Ibid. p. 13.

[9] Ibid. Appendix 6, Table 3, p. 60.

[10] Ibid. p. 15.

The examining bodies did not regard themselves as irresponsible, and they took action to counter any criticism. The College of Preceptors, for example, began to discuss means of ensuring closer contact with the schools in 1959, the year before the publication of the Beloe Committee's Report.[2] A small advisory board of a dozen members had been formed in 1956, partly of members of the College Council, and partly of Council nominees. Heads of schools participating in the College's examinations met in 1958, and their subject teachers were invited to sit on subcommittees which reviewed the syllabuses.[3] Nine regional advisory boards were afterwards set up from teachers in each area of the country.[4] Panels of teachers had been busy in revising the College's examinations, to render them more suitable for the new type of candidate, and others were enlisted to mark papers. The College of Preceptors was a teachers' organization, and claimed to be as responsible a body as any for holding power over the curriculum. Its regional advisory boards were in a position to test professional opinion by 1961, when they sent questionnaires to schools in their areas and received heavy support for certain of their policies.[5]

The Royal Society of Arts had awarded a School Commercial Certificate since 1927, which was of use to central school pupils, amongst others.[6] A School Technical Examination was instituted in 1957 and extended in the following year by the inclusion of domestic subjects, while a School Certificate specially designed for modern schools came in 1958. The 1961 Examinations Committee which governed such schemes consisted of 10 persons appointed by the Council of the R.S.A., 24 by local education authorities, one by the Association of Governing Bodies and Principals of Technical Institutions, seven by teachers' associations (mainly in further education) and 10 by commercial and professional bodies. There were, in addition, four H.M.I.s and three other coopted members.[7] The Examinations Committee thus had little benefit of advice from secondary school teachers at this level. The Committee was responsible for other examinations besides the School Certificate. Modern school teachers doubtless cooperated as examiners, but there was not likely to be that direct connection between teaching and examining favoured by the Secondary School Examinations Council. The R.S.A.'s full School Certificate was awarded on a group basis essentially, but the Society bowed to official opinion to the extent of recognizing individual subjects as worthy of a certificate after 1962. The examination remained a test for sixteen-year-olds.

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[1] *Secondary School Examinations Other than the G.C.E.*, p. 20. (The Beloe Report).

[2] College of Preceptors. Commentary, p. 4.

[3] *The Times Educational Supplement*, 14 November 1958, p. 1650.

[4] College of Preceptors. Commentary, p. 4.

[5] Ibid. Appendices B–F, pp. 14 ff.

[6] Royal Society of Arts. School Certificate Examinations, 1963, p. 5.

[7] Ibid. pp. 3–5.

The London Chamber of Commerce was constitutionally handicapped in a similar way from acting as a teachers' examining body in the officially approved style. Only 11 out of the 33 members of its Commercial Education Committee were from educational bodies, and few of these were teachers' representatives.[1] The Chamber had awarded vast numbers of certificates in widely differing subjects since 1890, and certain combinations of these could be exchanged for a 'School Certificate of Commercial Education'.[2]

The Northern Counties Technical Examinations Council was a regional body whose Governing Council included representatives of 16 local education authorities, with others from the ranks of education officers, principals of technical colleges, professional organizations, and from the University of Durham.[3] Assessors of the Ministry of Education served on the Council and all its Committees. The Council began examining in 1925. One of the ways in which it kept contact with the secondary school teachers after the introduction of a certificate for schools in 1958 was by arranging an annual conference. As many as 1,500 teachers and other interested persons met in Newcastle in 1960.[4] 4,238 candidates were entered in that year for an examination which was intended to be taken at the end of the fourth year in secondary modern schools. A headmaster speaking at the conference claimed a 30 per cent increase in both industry and attainment in his school because of the examination. Two years later, in 1962, the number of candidates in English language alone was 8,588.[5] From the Ministry's point of view this examination was unsatisfactory because it was a 'grouped' examination designed for fifteen-year-olds.

The Union of Educational Institutions was a federation of local education authorities, formed in 1895 by certain authorities in the Birmingham area. Many other authorities joined later, and its Secondary School Examinations Committee consisted of representatives from 22 counties and towns in 1961.[6] Examinations were kept more in the control of practising teachers than its membership suggests, for a number of teachers' advisory committees were appointed from nominees of the local education authorities. The Union had assessed the examinations set by secondary technical and commercial schools since 1941, endorsing their school leaving certificates.[7] Pressure by fifth year modern school pupils to take the technical examinations mainly intended for part-time students began to present a problem in the 1950s. The Union originally went into modern school examining when Bristol asked it to organize and administer a series of external examinations for school leavers at the age of sixteen. The request stemmed from a conference of head teachers and resulted in examinations from 1958 onwards.[1] From the first it was intended to encourage a good general education, by requiring passes in at least four subjects for the award of a certificate, one of these to be in English. Other local authorities soon joined in the scheme, to form a truly regional examining board. The Secondary School Examinations Committee was then established constitutionally, subsidiary Advisory Boards were set up, and thus the teachers were left in full charge of the syllabuses. The syllabuses were to be practically but not vocationally biased, and they were to be related to further education schemes in the neighbourhood. The final model of a regional examining board proposed by the central Secondary School Examinations Council was very similar to that of the U.E.I., though one was for 'subject', and one for 'group' examinations.

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[1] The London Chamber of Commerce (Incorporated). 1963 Regulations, Syllabuses and Timetables of Examinations, pp. 2–3.

[2] Ibid. p. 6.

[3] *Year Book of Technical Education*, 1962, p. 800.

[4] *The Times Educational Supplement*, 16 September 1960, p. 325.

[5] Northern Counties Technical Examinations Council. Question Papers, Reports of Examiners and Statistics for the Northern Counties School Certificate Examinations, 1962.

[6] Union of Educational Institutions. Secondary School Certificate Regulations and Syllabuses, 1961, pp. 1–3.

[7] Ibid. p. 4.

The Union of Lancashire and Cheshire Institutes was the first of the regional unions to introduce school examinations. Its largest local education authority decided to abandon an existing scheme of internal examinations used in selective central schools, and asked the Union to provide appropriate external examinations.[2] It was arranged for over 300 teachers from technical colleges and schools of all types to contribute to formulating a syllabus that would lead naturally to local further education courses. From 1956 onwards, certificates were awarded subject by subject, at one of three grades of pass, being intended for fifth year pupils in modern schools. They were designed to be useful for those entering further education. A very similar scheme to this was prepared by the East Midland Educational Union, to begin in 1960.[3] This last body began as an examining union for part-time day and evening students in 1912, and was a federation of local education authorities. Representatives of teaching institutions and of the Ministry were included on its Council.

The numbers taking the various external examinations for fifth year school children in 1959 were roughly as follows: G.C.E., 11,800; College of Preceptors (Senior Certificate), 100; London Chamber of Commerce, 11,000; Royal Society of Arts, 6,800; Union of Educational Institutions, 1,600; Union of Lancashire and Cheshire Institutes, 3,300. The total had grown from 36,000 to 46,000 by 1960, and was increasing rapidly.[4] The lower examination of the College of Preceptors was taken by 8,202 in 1959.[5] Many other pupils sat for examinations designed originally for part-time further education students and arranged by regional or national examining bodies.

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[1] Union of Educational Institutions. Secondary School Certificate Regulations and Syllabuses, 1961, pp. 4–5.

[2] Union of Lancashire and Cheshire Institutes. Secondary School Certificate Regulations and Syllabuses, 1961, p. 4.

[3] East Midland Educational Union. Secondary School Certificate Regulations and Syllabuses, 1963, pp. 2–3.

[4] Ministry of Education. *Examinations in Secondary Schools: The Certificate of Secondary Education. The Fourth Report of the S.S.E.C.*, 1961, Appendix C, p. 17, Table 1.

[5] Beloe Report, p. 15.

The advantages and disadvantages of the external examinations other than the G.C.E. were discussed widely in educational circles, and the arguments were summarized both in the 1959 Report of the Central Advisory Council and in the 1960 Report of the Beloe Committee.[1] The dangers of the examinations moulding the curriculum were as evident in 1960 as they were to Mark Pattison a century earlier. Such devices tended to make uniform patterns of teaching and to ossify the content of subject syllabuses. Large scale examinations were likely to be remote from teacher-control as, although teachers might be represented, this would tend to result in control at second-hand. Existing examinations often differed from the official ideal, some being 'grouped' and not 'subject' examinations, other catering for those a year below the approved age of sixteen.

The more immediate shortcomings of the existing examinations were listed briefly in the Beloe Report. Marking arrangements were stated to be unsatisfactory, and syllabuses were too narrow, lacking an aim appropriate to their task. Such criticisms could be overcome, as the College of Preceptors indicated; but the essential fact was that the external examining boards were out of the control of the class of persons on whom it was felt that responsibility should be placed. There was no guarantee that any of the existing bodies would back central policy. The College of Preceptors, for example, claimed large scale professional support for having examinations at the end of the fourth year, and not at the end of the fifth as the Secondary School Examinations Council required.[2] It was stated that a fourth year examination acted to deter pupils leaving at the earliest opportunity, whereas a fifth year examination would only persuade a small minority to stay. This conflict was likely to be resolved when the leaving age was raised to sixteen in 1970.

External examinations, it should be remembered, were greatly in demand by teachers, parents, pupils and local authorities. Part of the reason was their tonic effect upon the children, the subject of many a narration by teachers about successful pupils. It was quite apparent that, at the Knoll School at Hove, for example, the busy life of the school was geared to systems of external examinations which included those of the G.C.E., the R.S.A. and the U.E.I.[3] When a new system of local examinations was being designed in East Hertfordshire in 1962–63 few of the modern schools involved took less than three different sets of examinations. Thus, a large modern school of 1,300 children used the examinations of the Associated Examining Board, the R.S.A., the College of Preceptors and the U.E.I. in the fifth year, and another examination of the U.E.I. in the fourth year.[4] There were parallels in every district, for the prospect of examination success heightened morale. In a 1959 survey, 52 out of 69 head teachers estimated that the introduction of external examinations had resulted in an increased length of pupils' school life.[5] Prize lists from modern schools' speech days, demonstrated this further. Besides the examination results of the College of Preceptors, of the Royal Society of Arts (both Technical and School Certificates), and of the G.C.E. at Ordinary level, those of pupils in the sixth and seventh years at the William Grimshaw School, in Middlesex, were published in 1963. Most of these were for children taking Ordinary level a second time, but one person was successful at Advanced level.[1] The large number of examinations used was reminiscent of the days before the introduction of the School Certificate.

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[1] *Report of the Central Advisory Council*, 1959, pp. 72–89. Beloe Report, pp. 20–26.

[2] College of Preceptors. Commentary 1961.

[3] *The Times Educational Supplement*, 10 June 1960, p. 1194.

[4] Minutes of a Meeting of the East Herts. C.S.E. Mathematics Panel, 14 March 1962.

[5] Beloe Report, Appendix 6, Table 6, p. 61.

The advantage of using the existing examinations was that pupils and employers alike were given an impartial measure of attainment by a means that was ready to hand, and which had fairly wide currency. The lack of experience of the Secondary School Examinations Council in modern school work, and the lack of consultation with practising teachers before the publication of the Beloe Report was a frequent subject of criticism by those defending the *status quo*.[2] The Ministry was faced with the two problems, of interfering with a system that was already becoming entrenched, and of seeking national validity for its own schemes of local examinations. The future of external school examinations other than those for the G.C.E. lay in the balance while C.S.E. arrangements were being discussed.

8. THE CERTIFICATE OF SECONDARY EDUCATION

Central policy, generated by the Central Advisory Council and the Secondary School Examinations Council between 1958 and 1962 showed some awareness of dangers in the large scale examinations. The Minister, speaking at a Conservative Local Government Conference in 1960 confessed to a distaste for an examination below Ordinary level because this might lead to the possibility of repeated failure throughout a child's school life. He felt that the pressure of events would drive him nevertheless, to produce suitable examinations.[3] The Advisory Council proposed that external examinations should develop at regional or at local level.[4] The number of pupils expected to benefit from the new examinations was estimated to be about one-third of the modern school population. Formal internal assessment within the schools was still thought to be necessary irrespective of the development of examinations, and a system of leaving certificates organized at a local level was proposed.[5]

The Beloe Committee went into the matter more fully in 1960, and came to more definite conclusions. The examinations envisaged were to be taken at the age of sixteen, both to encourage pupils to stay at school and because later examination was likely to give a truer picture of ability. The examinations were to cater for the second 20 per cent of the age group, the first 20 per cent sitting for the G.C.E. A further 20 per cent might be expected to sit for a more limited range of subjects. Pass and credit markings were proposed, but there was no wish to define standards in terms of the G.C.E. at that stage. Subject examinations were felt necessary partly because pupils of quite low general ability would thus be allowed to take isolated papers.[6]

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[1] *The Hornsey Journal*, 22 March 1963, p. 16; William Grimshaw School Prize List.

[2] *The Times Educational Supplement*, 7 October 1960, p. 445; Letter from J. E. Brown.

[3] *The Times Educational Supplement*, 14 October 1960, p. 486.

[4] *Report of the Central Advisory Council for Education*, 1959, p. 85.

[5] Ibid. p. 89.

[6] Beloe Report, pp. 32–34.

There was every danger of a secondary school examination becoming a pale replica of the G.C.E., with academic overtones. Examples were given of the approach expected in English and handicraft in an appendix to the Report.[1] Special emphasis was laid upon the fresh approach to examining in subjects peculiar to the modern schools and teacher-control of the examinations was held to be important here. Regional examining bodies were backed by the Beloe Committee as a compromise, to permit the teachers to participate actively, while giving a sufficient degree of externality. Local authority examinations were deemed to imply local authority control of the curriculum, and were discouraged. Regional bodies were expected to be of a size able to cope with between two and three hundred schools, entering between 10,000 and 20,000 candidates annually.[2] The governing councils of these regional bodies were to include serving teachers, local authority representatives, and one or more representatives of further education institutions, area training organizations, and employers. Suggestions for the division of England and Wales into twenty regions were made in detail.[3] It was proposed that the actual conduct of the examinations should be delegated to committees of teachers, who would be responsible for the selection of examiners, the preparation of syllabuses, the setting of papers, and the marking of scripts.[4] At this stage, little was made of the many locally organized examinations established by local authorities and teachers from the 1950s onwards, though the regional boards proposed later by the main Examinations Council were to cater for local initiative. Strenuous efforts were, in fact, made by teachers and administrators to preserve some independence from the large regional bodies.[5]

Central coordination of such a large number of regional bodies posed a problem which was not fully explored. Years of experiment and development at a local level were anticipated. Proposals were made for enlarging the Secondary School Examinations Council to help it in its new tasks, and a 'research and development unit' was demanded to assist the Standing Committee of the Council which was to be responsible for the new examinations.[6] H.M. Inspectors were likely to form part of such a unit.

The proposals of the Beloe Committee did not pass without criticism. The City and Guilds of London Institute, for example, felt that ten larger regional boards would have been more satisfactory, on economic grounds, and the Examinations Council was later to concur.[7] The constitution of the Secondary School Examinations Council as a controlling body was criticized at the same time. The College of Preceptors put up strong arguments in favour of group examinations for fifteen-year-olds. Others were summarized in the Fourth Report of the Secondary School Examinations Council in 1961, which nevertheless adopted the Beloe Committee's Report generally, and claimed to have the backing of the majority of the teachers' organizations.[1] Central policy could be seen to be harking back to the days when the Norwood Committee could advocate internal examining, while yet being aware of the need for trained and certificated persons in a society in which 'opportunity' was a fashionable word. A shrill note of urgency might be detected, for the existing examinations were already developing rapidly in 1961, and it was very much a matter of diverting examining on to approved tracks before the situation grew out of hand and the examining bodies took up even stronger positions.[2] It was agreed at this stage by the Examinations Council that there should be subject examinations on a regional basis for fifth year pupils, largely and effectively controlled by teachers, coordinated by a central body, and assisted by a research and development unit.[3]

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[1] Beloe Report, Appendix 8, pp. 64–65.

[2] Ibid. p. 34.

[3] Ibid. Appendix 9.

[4] Ibid. pp. 34–35.

[5] Hertfordshire County Council. *The Certificate of Secondary Education.* Report approved by the Education Committee on 14 January 1963, p. 2.

[6] Beloe Report, p. 37.

[7] City and Guilds of London Institute. 82nd Annual Report, 1960–61, p. 18.

Ministerial approval of the principles enunciated in the Fourth Report was followed quickly by a Fifth Report of the Examinations Council in 1962, giving more specific proposals.[4] This Report carried the sub-title 'Notes for the Guidance of Regional Examining Bodies'.

A Standing Committee of seventeen was established for the new Certificate of Secondary Education, including six secondary school head teachers, together with others from local authorities, from further education establishments, and elsewhere. Five assessors were appointed by the Minister.[5] This Committee was to consider ways of welding together a vast number of differing local schemes, internal examinations and external examinations, into an ordered whole. It had to arrange for a certain standard over the whole country, while admitting local variations. This resulting flexibility seemed likely to be a great improvement upon the more rigid regionalism envisaged earlier.

Ten or fifteen regional bodies were expected in the Fifth Report, though the final number was not to be known until all applications for recognition were received. Each body was to cater for the schools in its region by providing external examinations, by moderating and validating approved internal examinations in schools or groups of schools, and by setting examinations constructed on the basis of syllabuses proposed by the schools. The first examination was to be held in 1965, and the intervening years were to be free for planned experiment.[6] Meanwhile, the Ministry's Curriculum Study Group was organizing experiments in collaboration with large numbers of schools, and many teachers began to spend much of their spare time in devising syllabuses and schemes of examination.[7]

Examinations were to be regional in the geographical sense, unlike those of the existing Royal Society of Arts, and they were to examine fifth year pupils, unlike the lower examination of the College of Preceptors.[8] Serving teachers were to occupy the majority of places upon the subject panels, examinations councils and governing councils suggested in the outline constitution.[1] The whole was to be coordinated by the Secondary School Examinations Council and the Ministry, which were not, however, intended to dominate the regional bodies or to cramp their style. Central control was to be achieved by withholding recognition of an examining body in the event of malpractice or incompetence. The system was to be supremely flexible at the local level, to give every freedom to the schools. Indeed, local experiments were encouraged and, as a transitional arrangement, groups of schools or local authorities were invited to form examining bodies for C.S.E. purposes.[2] Existing local schemes, described already, were thus to be emulated over the country as a whole. There was an incentive to plan locally, even though the examination was to be of regional or national significance. The regional body was thus to provide examinations of its own and also give an external means of assessment to existing local schemes, a function underlined by the Keighley Education Officer in 1961.[3]

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[1] Ministry of Education. *Examinations in Secondary Schools. The Certificate of Secondary Education. The Fourth Report of the S.S.E.C.*, 1961, p. 3.

[2] Ibid. p. 6.

[3] Ibid. p. 13.

[4] Ministry of Education. *Examinations in Secondary Schools. The Certificate of Secondary Education. The Fifth Report of the S.S.E.C.*, 1962.

[5] Ibid. p. v.

[6] Ibid. pp. 2–3.

[7] Ibid. p. x.

[8] Ibid. p. 6.

In some areas the work of establishing C.S.E. machinery followed immediately from existing plans. Thus, the Harrow Schools Leaving Certificate was generalized to serve for the whole of Middlesex, a matter approved by the County Education Committee within two months of the publication of the Fifth Report. A special feature of the Middlesex scheme was its provision for delegation of duties by the regional authority to probably five local examining boards within the county, each to handle about thirty schools, thus ensuring teacher-control at local level.[4] The actual region envisaged by the Examinations Council was ultimately to be larger in area than Middlesex alone.

Plans for another region were already well forward by October 1962. Hampshire and a dozen or more neighbouring local authorities, together with their teachers' associations, took the initiative in this case and established the Southern Regional Examinations Board in May 1963.[5] Discussions of the syllabuses proceeded at a local level amongst the teachers themselves.[6]

The future position of the existing examining bodies was difficult to envisage at this time. Some of the regional examining unions qualified approximately in their examinations to the ideal required by the Examinations Council. The national bodies fitted in less easily. The Royal Society of Arts was, however, commissioned to manage the examinations of the London County Council, by means of a new L.C.C. Secondary Schools Certificate Examination organization which was to begin work in 1963. This test was for fifth year children in London secondary schools, and it was to be slightly lower in standard than the R.S.A. School Certificate Examination. Four subjects were required as a condition for the award of a certificate; two of them (English, and mathematics or science), were to be compulsory. A special joint management committee made up of members of the two bodies was to control the examination. Eleven subject panels of teachers were appointed by the L.C.C. Education Officer, each one under an L.C.C. inspector, to produce syllabuses and specimen papers early in 1962.[1] The use of such administrative staff doubtless removed much of the heavy work from the teachers involved, but there lay the danger of removing the teachers' initiative as well.

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[1] *The Fifth Report of the S.S.E.C.*, pp. 6–7.

[2] Ibid. p. 11.

[3] *The Times Educational Supplement*, 6 October 1961, p. 426; F. H. Pedley: 'The Local Certificate; Wider Implications'.

[4] *The Times Educational Supplement*, 23 November 1962, p. 686.

[5] *The Times Educational Supplement*, 24 May 1963, p. 1150.

[6] *The Times Educational Supplement*, 9 November 1962, p. 600; letter from J. V. Davies.

The Northern Counties Technical Examinations Council had printed its own regulations for a Certificate of Secondary Education before the Fifth Report was published.[2] The new examination satisfied the conditions as far as the candidates were concerned. It was, however, intended to run concurrently with the fourth year School Certificate of the same body, and the Secondary School Examinations Council wished specifically to exclude examining bodies which conducted such tests.[3] The Ministry ultimately recognized a new Northern Regional Examinations Board for this area, though in the West Midlands region the Examinations Board was centred on the old-established Union of Educational Institutions.[4]

The East Anglian Board, covering nine county areas and five other local authority areas, was to begin examining in 1965.[5] One of the counties was Hertfordshire, where there were already three Area Certificate Examinations for fourth year secondary school children, and where the Ministry's Curriculum Study Group had been actively involved. The Minister himself encouraged further experiments which would enable internal fifth year examinations to be assessed externally by the regional boards, to counter any dull uniformity that might be expected from a large regional body, even though it was managed by teachers. Groups of teachers from most of the administrative divisions of Hertfordshire County Council set to work to design suitable syllabuses.[6] Fresh methods of testing came to light. An optional test in spoken English was proposed in North Hertfordshire, and so was a rural studies examination which relied largely on practical work assessed by the individual teachers. In South-West Hertfordshire a mathematics scheme was to be tried out which involved a paper of the multiple-choice type; there were plans too for allowing candidates the use of reference books. East Hertfordshire was to allow for flexibility in its mathematics examination by providing a wide variety of options, in addition to a basic paper common to all candidates. Several trial schemes were in operation by 1963, though progress in the rural areas was not so rapid as in the urban ones. A rich variety of methods came to light, and teachers found the discussions stimulating. Such local initiative was to be sponsored, if all went well, by the new regional examining board.

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[1] L.C.C. Secondary Schools Certificate Examination. Regulations and Syllabuses, 1961, p. 2.

[2] Northern Counties Technical Examinations Council. Certificate of Secondary Education, Regulations and Syllabuses, 1963, Foreword.

[3] *The Fifth Report of the S.S.E.C.*, 1962, p. 6.

[4] *The Times Educational Supplement*, 9 August 1963, p. 174.

[5] Hertfordshire County Council. *The Certificate of Secondary Education*. Report approved by the Education Committee on 14 January 1963, pp. 2–3.

[6] Hertfordshire Education Committee. *Certificate of Secondary Education*, First Progress Report. Report Approved by the Education Committee on 8 April 1963.

The emerging C.S.E. organizations were free to use fresh modes of assessment. The policy of delegation by regional boards to local bodies and even to individual schools suggested, for example, that field work might be taken into account in geography-examining.[1] The Southern Regional Board was to allow course work to be submitted by candidates where appropriate; notebooks and collections of fossils or butterflies were mentioned by way of example.[2] Many C.S.E. schemes involved an oral test of 'spoken English', and it was proposed that the telephone might be used to facilitate this.[3]

Experiment of this sort was both commended and stimulated when the Secondary School Examinations Council issued its first bulletin on the matter in October 1963.[4] With the assistance of the Curriculum Study Group, and others, a series of suggestions was then published for the benefit of teachers and examiners. Each subject of the school curriculum was tackled in turn, the principles governing its assessment were enumerated, and the methods available were explored in some detail. The purpose was not to determine the pattern of all syllabuses, but to give some idea of what was expected and what could be done. The Secondary School Examinations Council was acting in a new role, as a central clearing-house of ideas and information.[5] One of the topics to which considerable attention was given was the use of objective tests, of scientifically designed tests similar in principle to many used at 11 +, with the intention of minimizing marking errors.[6] Multiple-choice questions would form the usual type, each requiring short answers of perhaps only one word. The objections to such questions could be summarized by stating that although reliability was strengthened, validity was not. In other words, the examinations did not always appear to find out what was required. It would, of course, be foolish to handicap examiners by refusing to adopt new ideas as these become available. But it should be emphasized that any device which could be adopted by examiners for the sake of an apparent gain in efficiency needs to be watched very closely. The effect on the syllabuses of giving the early Tripos examiners too much power was mentioned by Henry Latham in 1877.[7] Examinations should not be allowed to become organized for the convenience of examiners.

The first Examinations Bulletin thus attempted to set the tone, summarizing attitudes and guiding but not necessarily determining what the regional and local bodies were to do. The Seventh Report of the Examinations Council was issued at the same time, and was incorporated as an appendix to the Bulletin.[8] Its chief purpose was to achieve some sort of comparison within the multitude of examinations which were about to spring up, and it served to define their scope. Two

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[1] *The Times Educational Supplement*, 3 January 1964, p. 12.

[2] *The Times Educational Supplement*, 14 February 1964, p. 378.

[3] *The Times Educational Supplement*, 6 March 1964, p. 589.

[4] Secondary School Examinations Council. *Examinations Bulletin* No. 1. *The Certificate of Secondary Education*, 1963.

[5] Ibid. pp. 1–2.

[6] Ibid. pp. 16–18.

[7] See Chapter 1.

[8] *Scope and Standards of the Certificate of Secondary Education. Seventh Report of the Secondary School Examinations Council*, 1963.

'reference grades' were suggested in a five-point scale. 'Grade 4' was the level to be expected of a sixteen-year-old pupil of average ability in a course suited to his age, ability and aptitude. 'Grade 1' was the mark to be awarded to a person who might be expected to pass in that subject at G.C.E. Ordinary level.[1] 'Grade 5' results would be recorded on the certificates providing that the candidates had managed to secure at least one higher grade in the examination as a whole. Less successful candidates were to be ungraded, but it was not intended that pupils should generally be entered for the examination who were known to be as weak as this. The grading system was designed to define standards, but it was also intended to do away with the pass/fail concept of an examination. Employers and admissions officers were to be provided with a profile of each candidate's abilities.

Comparability between the various examining bodies was to be achieved largely by statistical means. Where direct comparison of similar examinations was possible there was little difficulty, but calibration tests specially prepared and commissioned by the Secondary School Examinations Council provided an alternative method, and so did 'follow-up' studies.[2] The National Foundation for Educational Research and other agencies would be needed for regular objective assessments over the whole field.[3]

Externality and remoteness had been the curse of so many examining systems. Even a teacher-dominated regional body could be distant from its schools, and it was vital that teachers in the classroom should be sucked into the examining machinery at school or at local level. Participation would increase awareness and stimulate creative thought: it was high time that teachers ceased working for examinations and started instead to examine the normal work of the classrooms. Professional recognition of the C.S.E. at a national level was perhaps less important than for the G.C.E., but employers would expect standards to be kept relatively stable. To ensure comparability, the services of statisticians and expert examiners could be requested. Absolute comparability was, however, less vital than scientific purists might imagine. The value of the C.S.E. ideal was that it could encourage teachers to work together in the interests of their pupils, while gaining both in professional dignity and in a greater awareness of their subjects. There was a danger that teachers would favour 'Mode 1' examinations, with papers set by the regional examiners. C.S.E. examinations in 'Mode 2' and 'Mode 3', with syllabuses set by schools or local groups, and in the latter case marked locally as well, were perhaps likely to lack uniformity, but they could foster participation by teachers and lead to a livelier approach to education in the classroom.[4]

Some of the work of constructing syllabuses was done under the aegis of institutes of education, and some in connection with bodies such as the Institute of Handicraft Teachers or the Historical Association.[5] Much was undertaken by local bodies of teachers. The East Herts Division of Hertfordshire County Council arranged one of several pilot schemes in 1963 and 1964.[1] Each subject panel acted independently, to discuss, set and mark papers. Administrative work was undertaken by the head teachers acting as chairmen of the panels. Several full meetings of the mathematics panel were held each term from 1962 onwards, the members being chiefly representatives of the dozen or more schools participating, and similar arrangements were made for other subjects. In 1964, contact was made with the newly formed East Anglian regional body for purposes of recognition. There was every prospect of further hard work, and of constant evolution, but the experience was welcomed by those involved. Meetings could be arranged in the evenings within a small locality. This was a considerable advantage, for more distant regional meetings often necessitated absence from school and made an unsatisfactory disturbance in the teaching arrangements which was likely to be resented by colleagues and by parents.

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[1] *Seventh Report of the S.S.E.C.*, pp. 14–15.

[2] *Examinations Bulletin* No. 1, Appendix 4.

[3] Ibid. p. 7.

[4] *The Times Educational Supplement*, 4 September 1964, p. 316.

[5] *The Times Educational Supplement*, 5 July 1963, p. 15; M. N. Duffy, letter. *The Times Educational Supplement*, 26 July 1963, p. 126; I. D. Astley, letter. The Institute of Handicraft Teachers and the College of Handicraft. *The Certificate of Secondary Education*, July 1963.

All such experiments had this in common, that they were largely undertaken by the teachers themselves. There had been some progress since the early days of the College of Preceptors' examinations in the nineteenth century.[2] The public had then expected examinations to compare the work of schools, and therefore of teachers. The C.S.E. arrangements implied that teachers could assess their own work. Efficiency in a school was presumably safeguarded less directly than by immediate examination, but it is nevertheless likely that the changed attitudes reflected the improved standing of the teaching profession. It will be shown that professional bodies were generally characterized by some form of government over their own affairs.[3] The C.S.E. arrangements made it possible for the responsibility for examinations, and therefore effectively for the whole curriculum, to be placed firmly on the schoolteachers, so putting them in control of their own business at last.

[1] Minutes of the East Herts Certificate of Secondary Education Mathematics Panel.

[2] See Chapter 3, and Chapter 7, Section 7.

[3] See Chapter 8.

CHAPTER EIGHT

Professions and Vocations

1. EDUCATING TECHNOLOGISTS

The history of technical education has already been sketched to the end of the First World War.[1] The Science and Art Department, the City and Guilds of London Institute and later the Board of Education, provided examinations and monetary incentives to encourage students, most of them part-timers, to make the best use of locally provided facilities. Higher technical education was not a strong feature of the English educational scene. Science faculties at the universities were relatively slow to educate those who might be termed technologists, though here was another source of supply. It was strange that the 'workshop of the world' was provided with technologists and other technically trained men despite its educational system rather than because of it.

The system of Board of Education Science Examinations which succeeded those of the Science and Art Department came to an end in 1911. Stage I examinations were abolished, the former Stage II examinations were replaced by new 'Lower' examinations at a similar level, and 'Higher' examinations were set at a standard between Stage III and Honours.[2] It soon became clear that the Board of Education wished to throw the responsibility of organizing examinations in this field of further education on to the colleges and schools, and on to other examining bodies. The Board's 'Higher' examinations were continued for a while, though on a reduced scale, because it was felt that they might 'still serve a useful purpose in promoting efficient teaching and attesting individual progress'. The technical institutions themselves were forced to provide examinations for full-time students, who generally achieved a higher standard than the part-timers for whom the Board's new examinations were to cater. It was intended that balanced 'group' courses should be arranged by the institutions in association with industry, that 'Diplomas' be issued to full-time or 'sandwich-course' students, and that 'Certificates' be awarded to part-timers. Subject to certain conditions the Board was prepared to endorse these awards in order to give them some of the weight of an influential authority of national standing.[3]

A terminology was defined, and conditions were stipulated for the award of Grouped Course Certificates and Diplomas, and for their endorsement. 'Junior' courses were defined as those taking two years, being for those students who had just left their elementary schools at the age of fourteen. 'Senior' courses lasting three years were to follow these, though persons leaving a secondary or higher elementary school after a three year course might join in also at this stage. 'Advanced' courses of two years' duration were to follow the senior course.[4] The full-time courses had somewhat different arrangements.

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[1] See Chapter 4.

[2] Board of Education Circular 776, 20 June 1911. Science Examinations and Grouped Course Certificates, pp. 1–2.

[3] Ibid. pp. 2–3.

[4] Ibid. p. 5.

Board of Education endorsement was to be available for the certificates of students who had successfully completed suitable senior or advanced courses. The Board had first to be satisfied as to the equipment and the purposes of the course, particulars of the examinations being sent to the Board. Colleges organizing full-time courses were made to stand on their own feet by having to set their own examinations. In the final year of the course, internal examinations were to be held in conjunction with external examiners or assessors, and the Board reserved the right to see worked papers, particulars of standards, records, classwork, homework, notebooks, drawings, workshop exercises, and the like. Successes in approved external examinations, including the Board of Education Science Examinations and the City and Guilds of London Institute Examinations in Technology, might be recorded upon the part-time Course and Higher Course Certificates, but not upon the corresponding full-time Diplomas. Regular attendance, for at least 150 hours per year, was required of evening class students.[1]

Meanwhile, the Board's Higher Examinations were carried on in a reduced way. Only 2,558 candidates entered for them in 1911–12, and of these only 985 were successful.[2] Large numbers of technical schools were making arrangements, singly or in groups, to provide internal examinations for their students as an alternative. The great majority here would be at the lower level. The Higher Examinations were to continue even when the Lower General Examinations were abolished after 1916.[3] Examinations in Science were to be discontinued altogether after 1918, by which time they had virtually petered out in any case.[4]

The number of schools putting forward plans for their own awards was disappointingly small, and little use was made of the central endorsement. Such schemes were only being worked in a few colleges in the North of England.[5] The examinations lacked national validity and were insecurely related to industry and the professions. It was at this point that professional bodies, then of growing importance in technical work, stepped in to give their backing. Cooperation between the colleges, the Board of Education, and the Institution of Mechanical Engineers showed the way forward. A plan was evolved for issuing joint certificates. This 'National Certificate Scheme' was to introduce the professional institutions in the various branches of engineering, and later in other spheres, as third parties in the Board's original plans. Both the Board and the 'third party' were each to nominate three persons to form a Joint Committee or Examination Board, in a typical scheme. A college wishing to participate was to submit full details to this Committee for approval. Certificates were to be signed by the president of the professional institution involved, and by the principal of the college.[6]

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[1] Circular 776, p. 6.

[2] *Report of the Board of Education for the Year 1911–12* (Cd. 6707), p. 101.

[3] *Report of the Board of Education, 1914–15* (Cd. 8274), p. 60.

[4] *Report of the Board of Education, 1917–18* (Cmd. 165), p. 42.

[5] *Board of Education. Report of the Departmental Committee on Examinations for Part-Time Students*, 1928, p. 41.

[6] W. A. Richardson: *The Technical College, its Organization and Administration*, 1939, pp. 210–19.

As with the Grouped Course Certificates and Diplomas, two types were recognized, part-time and full-time. 'Ordinary National Certificates' were awarded at the end of a three year senior course, and 'Higher National Certificates' at the end of a further two years in an advanced course. The Ordinary National Diploma was given at the end of a two year full-time senior course, and the Higher Diploma after a three year period. The scheme arranged with the Institution of Mechanical Engineers in 1922 was quickly followed by others involving the Institute of Chemistry and the Institution of Electrical Engineers. By 1925 similar schemes were being negotiated with the Institution of Gas Engineers and with the Institution of Naval Architects and the Worshipful Company of Shipwrights.[1] Comparable arrangements came to be demanded in a great many industries and occupations. 'Textiles' and 'Building' schemes appeared between the Wars, together with another in 'Commerce'.

The National Certificate in Commerce was difficult to introduce because there existed no one large professional body of suitable standing to act as a 'third party'. Associations of teachers, and others interested in the matter, recommended that the Board of Education should act on behalf of the missing professional body. This idea was adopted, and courses were started in 1935–36.[2] The Association of British Chambers of Commerce came forward as a sufficiently mature and representative body in 1939 to take over the functions of the professional institution in the examinations scheme.[3] A new committee, representative of some fifteen interested professional institutions and of educational bodies, replaced this in a new scheme for commerce in 1951.[4] There were by this time National Certificates in subjects such as applied physics, metallurgy, building and textiles, and the list was growing. Rules laid down by the Ministry for more than fifteen different sets of Certificates were listed by 1963, apart from Higher Certificates and Diplomas.[5]

Certificate courses were generally composed of three essential subjects, while endorsements to a Certificate might be added later as additional subjects were taken for the purpose of gaining professional qualifications. Board of Education inspection of staffing and equipment assured the Joint Committee of a college's suitability for participating in a scheme. Students had to be at least sixteen years of age to be permitted to begin a course, and of a certain qualifying standard. Part of the Ordinary course might be missed by sufficiently well-qualified students, though the final year was always compulsory. 60 per cent of all possible attendances had to be completed each year.

Intermediate examinations were to be held by the colleges themselves, and these served to punctuate the annual stages of the courses, which were known as S1, S2, and S3, for the Ordinary National Certificate, and A1 and A2 for the Higher. External assessors were appointed by the Joint Committees for the final examinations, and these were to look at the draft examination papers and at the scripts marked by the staff. Up to 40 per cent of the questions might be replaced by the assessors, and up to 40 per cent of the questions might be made compulsory under the agreed rules.[1] Laboratory and other notebooks, drawings, and the like, had to be preserved by the students for production at the assessors' request. Students had to score at least 40 per cent of the total possible number of marks in each subject at the 'finals', and do likewise for homework in the last year. Course work and examination marks were to count towards the ultimate total in the ratio of 30 per cent to 70 per cent. 50 per cent of the total possible number of marks were to earn a pass, 85 per cent would win a distinction. Such were the arrangements in a typical scheme, but it should be borne in mind that the system was extremely flexible, and catered for differing courses in different parts of the country. There were criticisms that National Certificate committees in London were exercising too close a supervision at too low a level, for example in requiring students' homework marks in detail for S1 courses.[2] But examinations arranged by the regional examining unions were frequently used for the National Certificate courses.[3] The beauty of the scheme from an administrative point of view was that it could place the individual colleges in the position of arranging their own courses, within limits, and yet give the Certificates national currency. The professional bodies played a vital part, both by backing the organization of the examinations and by allowing successful students to use the examinations to win exemption from certain professional qualifications. Ambitious young persons could climb from the factory floor to the highest positions by means of part-time study organized in connection with these examinations.

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[1] *Report of the Board of Education, 1924–25* (Cmd. 2695), pp. 41–42.

[2] *Education in 1934* (Cmd. 4968), p. 38.

[3] *Education in 1938* (Cmd. 6013), p. 28.

[4] *Education in 1951* (Cmd. 8554), p. 19.

[5] *The Year Book of Technical Education and Careers in Industry*, 1964, p. 618.

1,017 students from 46 schools or colleges sat for the O.N.C. in Mechanical Engineering in 1922, and 521 passed.[4] 3,999 O.N.C.s and 1,331 H.N.C.s were awarded in 1939, while by 1948 the numbers had swollen to 7,997 of the former and 4,509 of the latter.[5] The vast majority of the certificate holders were engineers. 21,318 gained O.N.C.s, and 12,130 gained H.N.C.s in 1963.[6]

A smaller number of students took the full-time courses. The Ordinary National Diploma catered for those who were likely to enter industry as student apprentices at the age of eighteen. Relatively few courses leading to this qualification were arranged, for those proposing to continue in full-time education to the age of eighteen tended to stay at school until that age. Higher National Diploma courses, and other full-time courses leading to College Diplomas of various kinds, were rather more popular. They had the advantage over the Certificate courses of being wider and deeper in content. Diplomas frequently exempted their holders directly from the stages of examinations of professional bodies, whereas H.N.C. holders often needed to spend an extra year gaining the necessary endorsements for their Certificates.[7] The part-time route therefore compared unfavourably with the full-time, for ease of qualifying, though financial circumstances too frequently resulted in its being the only way to promotion and betterment. There were 95 successful Ordinary Diploma candidates in 1938, and 37 with the Higher Diploma.[1] By 1963 the numbers had grown to 1,193 and 1,150 respectively.[2]

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[1] W. A. Richardson: op. cit., p. 213.

[2] *The Times Educational Supplement*, 17 February 1956, p. 203.

[3] Union of Lancashire and Cheshire Institutes, 1961–62. General Regulations, pp. 36–37.

[4] *Report of the Board of Education for the Year 1924–25* (Cmd. 2695), p. 42.

[5] *Education in 1948* (Cmd. 7724), p. 43.

[6] Ministry of Education. Statistics of Education, 1963, Part 2, pp. 86–87.

[7] Ministry of Education. *Technical Education* (Cmd. 9703), 1956, p. 10.

Many full-time courses, of varying duration, were arranged by colleges singly in association with an interested industry, and this practice was common where 'national colleges' had been established in connection with one particular technology. The Heating and Ventilating College, with 90 full-time students in 1953, provides an example of this type of institution.[3] Colleges of Horology, and of Rubber Technology were others, where the scale of an important but smaller industry dependent on vital high-grade technologists resulted in their condensation at student level into one national centre.

The National Certificate route to the top of the profession was a difficult one because it involved evening work at the end of a tiring day, and demanded persistence of a high order. Both full-time and 'sandwich' courses were to become more widespread after the Second World War because of this, and because the work was becoming increasingly more complicated. Sandwich courses for diplomas and university degrees involved alternate periods, each of several months at least, to be spent in industry and in college. Full-time study was therefore interspersed with full-time practical work. The National Advisory Council for Education in Industry and Commerce published a Report on the subject in 1956.[4] The Government was greatly concerned with increasing the number of trained technologists, and backed this Report which showed the value of sandwich courses.[5] These were being developed for the building, chemical and electrical industries in 1956, to name but a few, though it had been in use for decades in some cases. Six-monthly periods were suggested by the Advisory Council, and entrants were expected to have qualifications amounting to two G.C.E. Advanced level passes, or a good O.N.C.[6]

The Government had already taken special steps in 1952 to foster the output of trained technologists by introducing a particularly high rate of grant to develop colleges specializing in advanced work. 24 colleges received this special 75 per cent grant in 1956.[7] The Government decided to concentrate the bulk of full-time or sandwich courses in specially favoured 'colleges of advanced technology', which were ultimately to become relatively autonomous, being financed by direct central grants. It was hoped to raise the capacity of 'advanced' courses at technical colleges by such means, from the 9,500 mentioned in 1956, to about 15,000 within five years.[8] About 15,150 students actually qualified in 1961, so the target was reached.[9] It was estimated that 1,500 of the 9,500 qualifying in 1954 gained university degrees in science or technology by studying at technical colleges, and that roughly half of the 9,500 became technologists in the sense in which the term was used in the White Paper.[10] Of course, a great many future technologists began their careers as university students, gaining a degree in pure science or technology, and specializing later, when they entered industry. Pure science degrees were gained by about 4,200 in 1956, and degrees in technology by about 1,850.[1] Although university graduates were numerically fewer than technical college students, it should be remembered that quite a large proportion of H.N.C. holders never passed beyond the technician stage, so that the university contribution was a vital one. Vast sums of money were placed by the Government at the disposal of the University Grants Committee in the 1950s and 1960s, and much of it went towards the expansion of science teaching.

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[1] *Education in 1953* (Cmd. 9155), p. 151, Table 61 (56).

[2] Ministry of Education. Statistics of Education, 1963, Part 2, p. 88.

[3] *Education in 1953* (Cmd. 9155), p. 25.

[4] Cmd. 9703, Appendix B, pp. 40–43.

[5] Ibid. p. 15.

[6] Ibid. p. 41.

[7] Ibid. p. 16.

[8] Ibid. p. 14.

[9] *Education in 1961* (Cmnd. 1737), p. 29.

[10] Cmd. 9703, p. 14.

A good reason for shifting the emphasis from part-time evening study to full-time or sandwich courses in further education was the high failure rate of the National Certificate and other such courses. This was the subject of an official Report in 1959.[2] There were 35,572 entrants to O.N.C. examinations, and 13,854 to H.N.C. examinations in 1958, yet only 18,028 and 9,647 respectively passed.[3] The failure rates, of about 50 per cent in the former and 30 per cent in the latter, were not exceptionally high for part-time education; they may be compared with a rate of about 60 per cent in the Board of Education's Higher Examinations in Science in 1912.[4] But full-time courses were less plagued by high failure rates, for there were 44 per cent at the Ordinary, and 19 per cent at the Higher National Diploma levels in 1958.[5]

A more comprehensive, and less complacent view of further education may be taken when it is realized that the percentages refer to those actually taking the examinations. Vast numbers, it is suspected, started out hopefully towards an H.N.C., only to give up or be diverted to an easier course before the final year. It was estimated by the Central Advisory Council that, in five-stage courses, little more than one-quarter received either an O.N.C. or a City and Guilds of London Intermediate Certificate at the end of three years or more, and that 10 per cent or less managed to win an H.N.C. or a Final Certificate. In four-stage courses, where the first (S1) stage was excused, over half received an O.N.C. or Intermediate Certificate, and between one-fifth and one-quarter an H.N.C. or Final Certificate.[6] It was concern at such wastage that prompted the rethinking of the functions of further education examinations, and resulted in the new scheme outlined in a White Paper in 1961.[7]

Budding technologists, being the abler students, were less affected by the difficulty of the courses than those who might only qualify as technicians, though using the same Certificate examinations. The 1956 White Paper had defined technologists largely in terms of those with the qualifications and experience required for membership of professional institutions. They were to have studied fundamental principles, and were to be able to take initiative and responsibility in non-routine employment. Most university science or engineering graduates and a good proportion of holders of Higher National Diplomas or Certificates were capable of reaching this standard. Technicians were defined at a slightly lower level, and were needed to work under the general direction of technologists. Many of these, too, held National Diplomas or Certificates.

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[1] Ibid. pp. 12–14.

[2] *National Advisory Council on Education for Industry and Commerce. A Report on the Wastage of Students from Part-Time Technical and Commercial Courses*, 1959.

[3] *Report of the Central Advisory Council*, 1959, p. 331.

[4] *Report of the Board of Education for the Year 1911–12* (Cd. 6707), p. 101.

[5] *Report of the Central Advisory Council*, 1959, p. 331.

[6] Ibid. pp. 354–64.

[7] *Ministry of Education. Better Opportunities in Technical Education* (Cmnd. 1254), 1961.

The time was coming when National Certificate courses on a part-time basis were too advanced for the technicians and too elementary for the future technologists, for the field of technology was expanding rapidly. There were calls for the National Certificate courses to be replanned for technicians instead of being a generally abortive preparation for professional qualifications.[1] It will be shown in the next two sections how the professions were to raise their standards and how technicians were to be examined.

A fresh move in the direction of educating more technologists came after 1956, with the creation of a new Diploma in Technology. This was awarded by an independent, self-governing board, established by the Ministry of Education. 965 students from 37 courses began work for the Diploma in 1957.[2] 66 courses were in progress by 1959, 53 of them sandwich courses and 13 full-time.[3] There were 3,207 first year students in 124 courses in the 1963–64 session, while 1,069 graduated in that year.[4] Industry was to cooperate fully in planning these courses, and 82 per cent of the students following sandwich courses had their fees paid by employers in 1959.[5] The 'Dip.Tech.', as it came to be known, was considered to be of university honours degree standard, and both first- and second-class honours could be won above the bare pass level.[6] Examiners were appointed by the participating colleges, subject to the approval of the National Council for Technological Awards, through its boards of studies. The National Council published a list of approved courses and external examiners.[7]

This Council provided a means of safeguarding standards whilst enabling the colleges to plan courses and conduct examinations. The Diploma in Technology was one of many ingenious administrative devices used in the examination of technical education. There had been a long tradition of giving the colleges their head in examining matters in this field: the National Certificates, for example, were a triumph of compromise. National standards were secured, and yet local and sectional interests were catered for. Other examining systems surely had much to learn from the technical ones, which continued to flourish, expanding and incorporating new subjects from year to year.

The 1963 Report of the Committee on Higher Education felt that Colleges of Advanced Technology should become technological universities, with the power to grant degrees.[1] It might have appeared that the Diploma in Technology was about to be replaced because it was of degree standard, but the Committee urged rather that its methods should be generalized. A Council for National Academic Awards was proposed, to award degrees at pass as well as at honours level outside the universities, and to cover a very much wider range of subjects than those of the 'Dip.Tech.' courses.[2] It was anticipated that the proposed council's members would represent the regional and area colleges involved, besides the usual variety of industrial interests. It was envisaged that the council might partly take the place of London University in examining colleges throughout the country. Many universities, at home and abroad, had grown up under the wing of London University, relying upon its external examinations to assess their standards until they became sufficiently mature to examine their own work. The expected advantage of a Council for National Academic Awards was that its examinations would be able to follow individual college courses more closely. It was stated that there had been an 'uprush of self-respect and vitality' in the former university colleges when they became self-governing, degree-awarding bodies, and it was in this spirit that the new central body was planned, having ample devolution of examining powers.[3]

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[1] *The Times Educational Supplement*, 31 May 1963, p. 1181.

[2] *The National Council for Technological Awards. Report for the Period August 1957 to March 1959. Second Report*, 1959, p. 1.

[3] Ibid. Appendix 111, p. 13.

[4] *Education in 1963* (Cmnd. 2316), p. 39.

[5] *The National Council for Technological Awards. Second Report*, 1959, p. 2.

[6] Ibid. p. 5.

[7] *The National Council for Technological Awards, List No. 10*, 31 March 1959, Appendix V, p. 17.

Late in 1964 a Royal Charter was awarded to the C.N.A.A., as it came to be known. This was the first time that full degree-giving powers had been entrusted to anyone in this country other than a university or the Archbishop of Canterbury.[4] The Council announced that it would award B.A. and B.Sc. degrees to both full-time and sandwich-course students for courses beginning in 1965, with M.A., M.Sc. or Ph.D. degrees for postgraduates. Such was the prestige of the word 'degree' that those students already holding a Dip.Tech. were to be allowed to exchange it for the Council's degree.[5]

2. PROFESSIONAL INSTITUTIONS

The word 'profession' means different things to different people, and is difficult to define. Those who had studied theology, medicine or law in a higher faculty of a medieval university, in an age in which guild associations proliferated for every occupation, may once have considered themselves professional men. At a later date it became the fashion for younger sons of the great families to adopt the profession of the Church, the Army, or the Navy. In more recent times the number of bodies loosely described as professions grew until they could scarcely be counted. Builders may now be heard to say that they will call upon the services of a plumber or a plasterer 'for a bit of professional advice'. When Alexander Carr-Saunders and Paul Wilson wrote their full treatment of the growth of the professions in 1933, they had to include groups as different from each other as midwives and mine managers, doctors and actuaries, and the number of categories must have increased since then.[6]

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[1] *Report of the Committee on Higher Education, 1963* (Cmnd. 2154), p. 131.

[2] Ibid. pp. 142–43.

[3] Ibid. p. 140.

[4] *The Times Educational Supplement*, 2 October 1964, p. 534.

[5] *The Times Educational Supplement*, 21 May 1965, p. 1597.

[6] A. M. Carr-Saunders and P. A. Wilson: *The Professions*, 1933.

Detailed accounts of the history of the professions have to be avoided in this work, for lack of space. Suffice it to say that professional institutions, the majority of which grew up in the course of the nineteenth and twentieth centuries, were organizations designed to advance their particular branches of knowledge by the exchange of information among members, and were concerned with the maintenance of proper standards. Correct behaviour was frequently expected of practising members, and a certain level of competence was usually required of entrants. In some instances, for example by the Apothecaries Act of 1815, a professional body was empowered by the State to examine its members to ensure a qualifying standard, but this was only usual where competence was vital to the public wellbeing.[1]

Professional bodies could be divided roughly into those which held examinations for admittance, often under statutory authority, being governed by elected representatives of the profession and by other interested parties, and into those where the examinations were organized by Government departments.[2] Mine managers, pilots and air pilots were, for example, in the latter category. The General Medical Council which was formed by the 1858 Medical Act and succeeding Acts was an example of the former type. Members from the universities, the Royal College of Physicians, and similar bodies, were to sit with doctors' representatives on this Council, which was to govern registration. Certain bodies were licensed under the Acts to qualify candidates for registration, and these too were represented on the Council.[3]

Barristers, solicitors, dentists and doctors were members of the better-established professions. Even by 1937, however, it could be stated that quasi-professional status was being sought by an increasing variety of callings and trades. There was an Institute of Certificated Grocers, another of Ironmongers; yet another existed for painters and decorators.[4]

The Institution of Civil Engineers was, for many years, the best-known body in the field of engineering. A Society of Civil Engineering was founded in 1771, and the Institution of Civil Engineers sprang up in 1818.[5] The charter of incorporation of this last body defined the purpose of the Institution as being for 'the acquisition of that species of knowledge (concerned with) the art of directing the Great Sources of Power in Nature for the Use and Convenience of Man'. The Institution began to set examinations as late as 1897, and a hierarchy of 'associates' and 'members' was built up.[6] The Institution of Mechanical Engineers was founded in 1847, with examinations beginning in 1913, while many other groups, most of them smaller, grew up at the turn of the century.[7] Thus, the Institution of Heating and Ventilating Engineers was founded in 1897, and the Institution of Gas Engineers in 1902. It is with entry to professions of these types, connected with engineering, that this section will be largely concerned.

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[1] A. M. Carr-Saunders and P. A. Wilson: op. cit. pp. 155–58.

[2] International Institute Examinations Enquiry: *A Conspectus of Examinations in Great Britain and Northern Ireland*, 1937, p. 133.

[3] Ibid. p. 135.

[4] Ibid. pp. 163–77.

[5] A. M. Carr-Saunders and P. A. Wilson: op. cit. pp. 155–58.

[6] Ibid. pp. 158–59.

[7] Ibid. p. 161.

The professional institutions set their own standards, partly by means of examinations, in the twentieth century. Practice of a specialized occupation was unlikely to be demanded of a person lacking professional recognition when the success of a great industrial enterprise depended upon the key individual. The professions flourished in an age of specialists and experts.

The Institution of Mechanical Engineers developed four grades of membership, namely 'student', 'graduate', 'associate' and 'member'. Success in examinations, together with practical experience, led to promotion from student status to full membership. Age limits were laid down. The Institution's own examinations were in three stages after the Preliminary Examination. 'Graduates' qualified when they had passed Part I and Part II; 'associates' had to have passed all three parts; full membership came after responsible practical experience. Part I was held in common with other engineering institutions; Part III was mainly intended to stimulate interest in the administration of the industry and was not technically difficult.[1]

It was also possible to gain exemption from the whole or parts of these examinations by taking other public examinations. Thus, a G.C.E. O level pass in English language exempted the student from the Part I English examination. The Electrical Diploma of Northampton Polytechnic exempted students completely from Part I.[2] Engineering pass degrees exempted students from Parts I and II before 1960, while an honours degree gave complete exemption. The task of qualifying was stiffer after that year, for any degree in mechanical engineering exempted only from Parts I and II, while a civil engineering degree exempted the student from Part I and sections only of Part II. The same situation held for the majority of engineering and science degrees. Diplomas in Technology, on the other hand, generally exempted from all three parts, though these new higher qualifications were of recent coinage. College diplomas of various descriptions tended to exempt their holders from the first two parts.[3] Additional conditions were made for H.N.C. holders. Exemptions were made on a subject-for-subject basis between the Higher National Certificate in Mechanical Engineering and Part II, but these subjects had usually to be assessed specially in the final year of study. An intricate network of extra subjects and exemptions was published in detail.[4]

Both 'student' and 'graduate' membership of the Royal Institute of Chemistry were designed to be transitional to the two corporate grades of 'associateship' and 'fellowship'. Part I of the graduate membership examination was roughly of pass degree standard in chemistry, while Part II approximated to the level of a good honours degree in the subject. First- and second-class university honours degrees in chemistry exempted candidates from both parts, others gave only partial exemption.[5] Subject to certain conditions, an H.N.C. might qualify its holder for Part I of the graduate membership.[1] Two further years of suitable and approved practical experience were then required before admission to associate membership.

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[1] The Institution of Mechanical Engineers. Rules for Examinations and for the Submission of Theses, July 1958, pp. 5–6.

[2] Ibid. p. 41.

[3] Ibid. pp. 44–45.

[4] Ibid. p. 46.

[5] The Royal Institute of Chemistry. Regulations for Admission to Membership, June 1958, p. 5.

Great strides were made in technology in the course of the century, and these were reflected in raised standards for membership of the professional institutions. For example, standards began to rise noticeably in engineering in 1953, when the Institution of Electrical Engineers introduced Part III specifications much above the original level of its examination regulations, bringing in technical requirements of an advanced nature.[2] This resulted effectively in an increasingly competent membership. Possession of an H.N.C. of a certain standard, together with endorsement subjects, was no longer enough to qualify the student for graduate membership of the Institution, for this only exempted him from Parts I and II. Part III was a much more difficult hurdle. Again, the Institution of Civil Engineers decided to stop accepting H.N.C. qualifications for exemption from its examinations in September 1962, and thus put a hindrance in the way of students studying in the evening.[3] The part-time route was not entirely blocked to the civil engineer, as he could still study in the evenings for the professional examinations themselves, but the customary intermediate steps were removed. The two larger Institutions of Mechanical and of Electrical Engineers declined to adopt a similar course later in the year, so that the part-time route remained open here.[4] These two institutions felt that they could not neglect such a useful source of recruits, though National Certificate courses were in many ways unsatisfactory, being tiring for the students who studied after work, and having a high wastage-rate. A more generous provision of full-time and sandwich courses was needed if the situation was to be improved, and progress was made gradually in many professions. Thus 'block release' arrangements were being developed by the Association of Certified and Corporate Accountants, which would give young people the opportunity of having 90 weeks of full-time study in their five year course.[5]

Many persons qualified for their professions or occupations by studying for a degree first or by sitting for the public secondary school examinations. At one extreme, graduate apprenticeships and similar arrangements were available to fit university graduates into niches in industry and the professions. At the other extreme, most bodies who would have described themselves as professional, demanded a certain minimum of success in the secondary school examinations as evidence of a basic education. Eight professional bodies accepted the Cambridge University Local Examinations in 1895 as exempting candidates from their preliminary examinations.[6] Arrangements were negotiated with fifteen bodies by 1921, to make possible the use of the School and Higher Certificate Examinations for entrance to the professions.[1] The professional requirements continued to be negotiated in terms of success in the G.C.E., and were circulated as a pamphlet that grew steadily in volume. About thirty bodies were mentioned in 1950.[2] The 1962 list contained well over seventy.[3]

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[1] The Royal Institute of Chemistry. Regulations for Admission to Membership, June 1958, p. 16.

[2] Examination Regulations of the Institution of Electrical Engineers, September 1953, quoted in C. Grad: 'Recent Developments Affecting the Patterns of Craft, Technical and Technological Training'. B.E.A.M.A. Education Conference Report of Papers and Discussions, 1957, p. 5.

[3] *The Times Educational Supplement*, 22 March 1963, p. 588.

[4] Ibid.

[5] *The Times*, 1 May 1963, p. 18; E. Spencer's Address to the Association of Certified and Corporate Accountants.

[6] *Report of the Royal Commission on Secondary Education*, 1895, Vol. 5, p. 276.

If entrance to the professions was vastly expanded at the lower level, entry at graduate level was no less impressive. Mention has already been made of the ever-increasing generosity of public grants to university students, so that a university education became financially possible for everyone of sufficient natural ability and inclination. The masses entering the universities in the 1960s were bent on professional careers when they had graduated. The liberal education of the nineteenth century undergraduate, based upon classics or pure mathematics, was becoming perhaps a little less popular. While they may not have decided finally upon their careers, most students kept one eye open to the future, and took highly specialized honours courses that would be useful steps to employment, and to advancement in a profession. However, very large numbers of the ablest boys followed courses in pure science in preference to technology.[4] Sir Eric Ashby, then President of the Queen's University, Belfast, described as false the antithesis between a liberal and a specialized education, but it was the increasing degree of specialization that worried most of those concerned with the universities at the time.[5] The universities had traditionally set themselves apart from worldly pressures, using, in the nineteenth century at Oxford, for example, a curriculum that was not directly applicable to future employment. Even then, however, the civic colleges were soon to spring up, to include the disciplines of higher technological education. The rapid growth of technology in the years to come led to a demand for experts which never slackened; it was in this situation that the professional institutions flourished.

3. LOWER EXAMINATIONS USED IN FURTHER EDUCATION

The examinations of the Science and Art Department which catered for evening school pupils were very largely 'single subject' examinations. It was not necessary to follow a well-balanced course to receive a certificate of this sort, but study came to be organized into coherent grouped courses over the years. The Sanitary Engineering Department of Manchester Technical School introduced the idea in 1890, and schemes flourished on these lines in Lancashire, Yorkshire and Cheshire in 1905.[6] The 1904 Grant Regulations helped to develop grouped courses also, because central grants were no longer tied narrowly to examinations of the Science and Art type, as they had been before. The Board of Education became so keen to encourage grouped courses that it was prepared to reorganize and finally to terminate its own Science Examinations, the successors of those held by the Science and Art Department. Stage I examinations were abolished after 1911 for this reason; 'lower' examinations at the old Stage II were introduced for a while.[1] Mention has already been made of the way in which central provision of examinations was steadily withdrawn.

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[1] *Report of the Board of Education for the Year 1920–21* (Cmd. 1718), p. 40.

[2] Ministry of Education Circular 227, 28 September 1950. Professional Bodies' Requirements in Terms of the G.C.E.

[3] Ministry of Education Circular 5/62, 24 August 1962. Professional Bodies' Requirements in Terms of the G.C.E.

[4] Oxford University Department of Education: *Technology and the Sixth Form Boy*, 1963.

[5] E. Ashby: *Technology and the Academics*, 1958, pp. 75–77.

[6] *Education 1900–50* (Cmd. 8244), p. 48.

The City and Guilds of London Institute, which also held technological examinations at a similar level to those of the Board of Education, was asked by the Board to end some of its work after 1918. Colleges and authorities were thus placed in the position of having to think out for themselves, and to provide, well-balanced systems of examinations. This was a way of ensuring that local needs would be satisfied. Central financial control, linked with inspection, was to help to ensure that standards were maintained and courses properly balanced. The actual provision of schools and classes had become very varied. No fewer than ten different types of schools and institutions were listed in 1924; most were financed under local education authority arrangements for higher education.[2]

Certain examinations were, indeed, organized by the individual colleges, but the danger here was that the certificates that were issued would lack a wide currency. It was at this time that the regional examining unions of local authorities began to flourish. The Union of Lancashire and Cheshire Institutes was the most formidable of these, having started with the mechanics' institute movement. The changes introduced by the Technical Instruction Acts and the 1902 Education Act resulted in its becoming more or less an association of local education authorities in the North-West. It was easiest for these bodies to place their examining functions in the hands of such a regional body. Apart from gains in efficiency and economy, there were all the advantages to be had of common standards and interchangeability of students between courses in different colleges. Not least, the fact of having to associate for the purpose of constructing the examination was found to provide a beneficial stimulus to teachers and others who participated in this matter.[3] The area covered by the Union was gradually extended over the years from the original local authorities in the Manchester district.

It was in May 1914 that a deputation from the Union of Lancashire and Cheshire Institutes visited the Board of Education; conferences were arranged between officials of the Board and members of the Union's Council. It was decided that the Board would recognize the Union's grouped course examinations in place of internal college examinations, upon certain conditions. First, an advisory committee was to be set up for each of the grouped courses of study. These advisory committees were, by 1961, to be comprised of three members of the Union's Council, nine teachers' representatives elected annually at a special meeting, and in certain cases there were to be teachers' representatives appointed by other advisory committees. Secondly, examination boards were to be established for technical, commercial and domestic subjects. These boards were to comprise three members of the Council, two persons nominated by the teacher members of the appropriate advisory committee, and also the Chairmen of the groups appointed to moderate the examination papers. The experience of men in industry was needed, and the constitution of the committees was widened in 1923–24. Additional provision was made in 1948 by the appointment to certain of the advisory committees of up to eight representatives of industry and commerce. There existed fourteen examination boards and an equal number of advisory committees by 1961. The examination boards recommended the appointment of examiners, moderated the questions, scrutinized pass lists, edited the examiners' reports, and made general recommendations concerning the examinations. The advisory committees were concerned more with the curricula and syllabuses.[1]

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[1] Circular 776, 20 June 1911. Science Examinations and Grouped Course Certificates, pp. 1–2.

[2] *Report of the Board of Education for the Year 1924–25* (Cmd. 2695), p. 24.

[3] Union of Lancashire and Cheshire Institutes, 1961–62, General Regulations, Historical Note, p. 33.

Large numbers of candidates sat for the Union's examinations: 80,862 candidates took 231,757 papers in the 1961 further education examinations.[2] It was therefore vital that there should be delegation to a very great degree, particularly as the number of courses and stages was so high.

The Advisory Committee for Mechanical Engineering and Naval Architecture consisted (as mentioned previously) of three members of the Council and nine teachers' representatives, together with eleven others. There were two from the Electrical Engineering Advisory Committee, two from the Production Engineering and Mechanical Engineering Trades Advisory Committee, and one each from the Institution of Civil Engineers, the Federation of British Industries, the Amalgamated Engineering Union, the Institution of Civil Engineers, the Institution of Mechanical Engineers, and two from the Ministry of Education.[3] This illustrates the widely representative way in which the advisory committees were made up. Of course, the Council of the Union itself comprised a large number of representatives from very different fields, and in 1961 contained 49 representatives of local education authorities, 30 representatives of colleges, and almost as many representatives again from teachers' organizations, industry, and other sources.[4] New classes of members were gradually admitted over the years, as were the Board of Education officials in 1932.[5] Such committees as these are clumsy to describe in writing because of their varied membership. Without them, however, there was every risk of the examinations losing touch with the schools and colleges, or with industry. The success of the National Certificate Examinations was one of the reasons why the professional and industrial bodies were brought more closely into touch with the examinations.[6]

Very similar arrangements existed within the three other educational unions which, though less venerable than the Union of Lancashire and Cheshire Institutes, flourished in their own regions. The variety of courses was considerable. The bulk of the students took examinations for craft and technical courses that had been developed at the close of the nineteenth century. The end of the Second World War, however, saw great increases in numbers, both of courses and of students.

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[1] Union of Lancashire and Cheshire Institutes, 1961–62, General Regulations, pp. 35–36.

[2] Ibid. p. 34.

[3] Ibid. pp. 21–22.

[4] Ibid. pp. 16–19.

[5] Ibid. p. 33.

[6] *Report of the Departmental Committee on Examinations for Part-Time Students*, 1928, p. 24.

The City and Guilds of London Institute played a prominent part as a central examining body in a related field. Over 138,000 candidates from Britain and the Commonwealth were examined in 1961, at 1,200 local centres, and the numbers continued to grow.[1] The Examinations Board consisted of the usual conglomeration of representatives to be found on committees concerned with further education. Of the 30 members sitting in 1961, four represented the Ministry or the Scottish Education Department, three were local authority representatives, seven were nominated by teachers' organizations, and the regional examining unions and the regional advisory councils for further education sent their nominees also.[2] The Institute relied very heavily upon advisory committees. Five examinations at various levels were the concern of the Heating and Ventilating Engineering Committee, for example. This Committee of eighteen included three teachers' representatives, one H.M. Inspector and eight professional engineers or trade union workers. The examination schemes were drawn up by the Committee in collaboration with the Education Board of the Heating and Ventilating Industry, and they relied for success upon the co-operation of local industry for practical tests.[3] The Institute's intention was to use committees of this sort to provide an administrative framework with a minimum of control, and it could be claimed that the vitality of the Institute depended largely upon them.[4] Examiners were recommended by the advisory committees, and sub-committees scrutinized draft papers.[5]

The main awards of the Institute were the Intermediate Certificate (after a two or three year course), the Final Certificate (after two further years), and the Full Technological Certificate (which was suited for the works manager or for a comparably responsible person). Courses ranged widely in difficulty, to cater for plant operatives at one extreme and for technologists and those at the threshold of management at the other.[6] It was difficult to define a standard course, as levels and practice varied from trade to trade. In its examination work the Institute was little more than the means of bringing together those interested in examinations in individual trades; but it also provided the prestige of a nationally known body.

The regional unions did not, at first, come anywhere near covering the whole country for examination purposes, and so the central City and Guilds Institute found itself requested by the more isolated local authorities to provide examinations of a similar kind to those of the unions. When a Departmental Committee of the Board of Education issued its Report in 1928, it was suggested that the examination of craft subjects in widely separated schools might be left to the Institute and that, in other cases, the unions should work with the Institute, the former examining the cognate subjects, the latter testing the crafts.[1] The Committee was anxious that the awards given to students should have national significance. The regional examining unions feared loss of numbers if nationally organized examinations were allowed to take root in their areas. The Institute differed from this in principle, arguing that local authorities should not be compelled to rely upon one examination exclusively, but should be given a choice. The Board of Education had to intervene, and a compromise was agreed.[2] The Institute and the unions moved closer together, arranging for an interchange of members on their governing councils, for example. The 1933 'concordat' introduced a period of cooperation. The Institute was permitted to submit proposals for a fresh 'Intermediate' examination in a particular subject on the condition that a properly constituted advisory committee agreed as to the necessity of it. A joint standing committee was set up in 1955 to advise on the arrangements for new examinations, and by this time the various bodies were working in close harmony.[3] Certain regional examinations, for example, were accepted as part-qualifications for the City and Guilds' Full Technological Certificates.

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[1] City and Guilds of London Institute. General Regulations, 1961, p. 9.

[2] Ibid. pp. 4–5.

[3] City and Guilds of London Institute. Heating and Ventilating Engineering Regulations and Syllabus for 1961, pp. 2–5.

[4] City and Guilds of London Institute. General Regulations, 1961, p. 10.

[5] Ibid. p. 13.

[6] Ibid. pp. 12–14.

The 1928 Departmental Committee had stated that the regions of the examining unions were already too large; the Union of Educational Institutions operated over a particularly extensive area, in the southern half of the country.[4] New regional bodies in the South-West, in London and the South-East, and in South Wales and Monmouthshire, were proposed, though little came of it. The Committee laid it down as a principle that each region should have a centre, easily accessible to all concerned, to ensure that representative teachers could actually be associated with the work of examining at all stages.[5] The danger of a syllabus becoming overloaded was a very real one in a large examining union when so many different institutions had to be accommodated. The disadvantages of having an external examining system were as apparent in part-time voluntary education as in secondary education. But the advantages of widespread recognition of certificates, and of continuity of syllabus despite frequent staff changes, more than counterbalanced this, particularly for the smaller institutions. External examinations, too, served to pin down to a syllabus the many part-time teachers who were selected for their practical knowledge rather than for their teaching ability.[6]

The disadvantage of having purely external examinations was that they hampered the really good teachers, and ignored students' course work.[7] In 1928, internal examinations were only felt by the Departmental Committee to be useful in the largest schools, and it was suggested that the examining unions should arrange for testing at every stage except at the end of the first year of the junior course. Formal certificates were only to be awarded at the end of the junior, senior and advanced stages, but there was to be a record of success at each stage.[1] It was thought that some credit should be given for classwork and homework, in a way similar to that of the National Certificate courses.[2]

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[1] *Report of the Departmental Committee on Examinations for Part-Time Students*, 1928, pp. 43–44.

[2] *Education in 1933* (Cmd. 4631), pp. 34–35.

[3] *Education in 1955* (Cmd. 9785), p. 50.

[4] *Report of the Departmental Committee on Examinations for Part-Time Students*, 1928, pp. 35–36.

[5] Ibid. pp. 34–35.

[6] Ibid. p. 62.

[7] Ibid. pp. 21–23.

The Royal Society of Arts and the London Chamber of Commerce specialized in setting commercial examinations. These were usually managed by the local education authorities, and there was little direct connection between the colleges and the examining bodies. External examinations were not always suitable, and so internal ones were arranged as well, sometimes assessed by external examiners. The colleges or the local authorities paid the bulk of the examination fees, an important point, this, when the education of voluntary part-time students was involved. Both single-subject and grouped courses were arranged.

The Departmental Committee Report of 1928 criticized the constitution of the two chief examining bodies for commercial education. The Royal Society of Arts contained on its Examinations Committee representatives of a variety of educational interests, but not directly of commercial bodies. The London Chamber of Commerce, on the other hand, contained business men and teachers, but no representatives of the Board of Education.[3] It was recommended that the two bodies should act together to carry out a single series of examinations. This was not to be, but the situation was somewhat remedied in the course of time, for by 1961, there were ten representatives appointed by commercial and professional bodies, out of a total of sixty-two sitting on the Royal Society of Arts' Examinations Committee.[4] One-third of the members of the Education Committee of the London Chamber of Commerce were representatives of teachers and other educational interests in 1963.[5]

One of the regrettable features of examinations of part-time voluntary students was the monstrously large failure rate. Statistics differed widely from district to district, from college to college, and from one subject to another, but the overall impression was disappointing. A survey made by Lady Gertrude Williams and published in 1957, instanced a carpentry and joinery course with an initial intake of 51. 36 passed the first year test, but 10 of these failed the second year test, and only nine eventually passed the Intermediate City and Guilds Examination.[6] Again, 13 entered a bricklaying course at a college specializing in building instruction. Only one passed the Intermediate Examination, and none ultimately passed the Final. Doubtless a few of the failures attempted the course again, but even so the situation was scarcely satisfactory, and it was quite general. Poor teaching, a weak general education, and examinations of too great a difficulty, were some of the reasons put forward to account for this state of affairs. It is to be suspected that the willpower needed to persist in following a course of study in the evenings was lacking, and the custom of releasing employees for study during the day therefore gained ground. Employers released 42,000 for daytime further education of all descriptions in 1938; ten years later the number was 190,000.[1] By 1963 the number of part-time day students had more than trebled to 608,000.[2] The numbers following evening courses, then 778,000, had remained relatively static since before the War.

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[1] Report of the Departmental Committee on Examinations for Part-Time Students, 1928, pp. 31–33.

[2] Ibid. pp. 27–28.

[3] Ibid. p. 61.

[4] Royal Society of Arts. Ordinary (Single Subject), Examinations, 1961, Regulations and Syllabuses, pp. 16–17.

[5] The London Chamber of Commerce (Incorporated). Regulations, Syllabuses and Time Tables of Examinations, 1963, pp. 2–3.

[6] G. Williams: *Recruitment to Skilled Trades*, 1957, pp. 165–68.

Technicians and craftsmen were needed in large numbers after the Second World War, when, amongst other things, it was realized what a vital part they could play in backing up the work of the better-qualified technologists. Concern was registered in the 1956 White Paper on Technical Education at the wastage of potential technicians and, again, in the 1961 White Paper on Better Opportunities in Technical Education.[3] 'Day continuation schools', envisaged in the 1918 Education Act to provide compulsory part-time day education for school leavers, had not materialized, except at Rugby, or under voluntary arrangements in certain localities.[4] 'County colleges' were to be provided under the 1944 Education Act for a similar purpose, and this provision would doubtless have increased the number of trained men had the Act been brought fully into operation earlier. Under the county college scheme, local authorities were to make one day per week attendance compulsory for all those under the age of eighteen who were not in full-time employment or in certain limited forms of employment.[5] Attendance could be arranged in various ways, by one day or two half-days weekly, or by one long spell of continuous education. Expense and lack of resources hindered the wide development of such colleges for all young persons but, nevertheless, 'day release' became a reality for many. It became official policy to increase and improve facilities in further education rather than to make such education compulsory at a given date, as had been intended originally. Means of improving opportunity were sketched in the 1959 Report of the Advisory Council.[6]

Provision for day release depended upon negotiations carried out between employers and the unions, and discussions were stimulated by the Ministry of Labour in 1942.[7] The ratio of apprentices to other employees had long been a thorny problem, because it affected redundancy. Some systematic and agreed basis of training began to emerge. Thus, the Engineering and Allied Employers' National Federation and the Manual Workers' Union affiliated to the Confederation of Shipbuilding and Engineering Unions published an agreement in 1947.[8] Pending the provision of county colleges under the 1944 Education Act, apprentices were required to receive one day's compulsory education each week at a technical or similar school, and they were to be paid at the normal rates during their absence from work. Craft apprenticeship was normally to begin at the age of sixteen, and end at twenty-one. Evening class attendance was to be encouraged, but not made compulsory, and there were to be written agreements for all apprentices. Similar arrangements emerged in other industries, though with differing details. Most stipulated one day per week release for apprentices, and defined the trades and the crafts for which apprenticeship could be arranged.

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[1] *Education in 1948* (Cmd. 7724), p. 40.

[2] *Education in 1963* (Cmnd. 2316), p. 34.

[3] Ministry of Education. *Technical Education* (Cmd. 9703), 1956, p. 20. Ministry of Education. *Better Opportunities in Technical Education* (Cmd. 1254), 1961, p. 7.

[4] Ministry of Education Pamphlet No. 3: *Youth's Opportunity, Further Education in County Colleges*, 1946, p. 4.

[5] Education Act, 1944, Sections 43–46.

[6] *Report of the Central Advisory Council*, 1959, Part Six, pp. 313–403.

[7] G. Williams: op. cit. p. 20.

[8] Ibid. p. 70.

Another way of increasing the number of technicians was by arranging special courses for them. Sandwich courses, as well as day release arrangements, were felt to be suitable when the Government published its White Paper in 1956, and these were to lead to Higher National or City and Guilds Full Technological Certificates.[1] About forty colleges were running special courses at the new technician level in 1956–57. Thus, the Institution of Electrical Engineers had arranged for a suitable course to be prepared by the City and Guilds of London Institute, and the syllabus was published in August 1955.[2] The idea of using relatively larger numbers of technicians than of the abler technologists gained ground, so that at least one section of industry actually considered employing them in the ratio of five to one respectively, as suggested in the 1956 White Paper.[3]

A new Government policy to reduce wastage in the technician and other courses was explained in the 1961 White Paper.[4] It was considered that faulty selection might be an important factor in producing such a high failure rate, and proposals were made to counter this. Diagnostic general courses of one or two years (the stages were to be known as G1 and G2) were to be taken at the beginning of further education unless the student already possessed four appropriate G.C.E. Ordinary level passes. Courses similar to these had already been started by the Union of Lancashire and Cheshire Institutes in 1953–54, using the same terminology.[5] The new Ordinary National Certificate course was to last for two years instead of three, and the entry standard was to be higher. The part-time route to the professions was thus to be kept open, in theory at least. More special technicians' courses were to be initiated as well, to be linked with specific industries, and mainly to be arranged by the City and Guilds Institute.[6] The need for careful handling of the students as they were leaving full-time education was, however, the main accent of the 1961 White Paper, for it was at this stage that wastage was most alarming. Not all agreed as to the causes of the trouble. Ethel Venables, for example, stated that it was more often indifference to examination results on the part of parents and employers which led to the wastage.[7]

There were several attractive features of further education examinations in

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[1] Ministry of Education. *Technical Education* (Cmd. 9703), 1956, p. 20.

[2] C. Grad: 'Recent Developments Affecting the Patterns of Craft, Technical and Technological Training', p. 6. B.E.A.M.A. Education Conference: Report of Papers and Discussions, 1957. [3] Ibid.

[4] Ministry of Education. *Better Opportunities in Technical Education* (Cmd. 1254), 1961.

[5] *Technology*, July 1961, p. 186.

[6] *Better Opportunities in Technical Education* (Cmd. 1254), 1961, p. 3.

[7] *Technology*, February 1961, p. 38.

England. First, for those prepared to work hard in the evenings, there was every prospect of achieving qualifications that could take them to the top of their crafts or professions. The failure rate was high, but then it was usually possible for the student to repeat a year. The courses were heavily subsidized by the local authorities, who also paid the greater part of the examination fees, so that expense was not really an obstacle. Again, the examinations were kept up-to-date by committees, the members of which were representative of widely different educational, professional and industrial bodies. Teachers played a large part in arranging the examinations, whether by setting internal examinations, whether by more intricate schemes involving external assessment, or whether by being represented on advisory committees for a particular industry or for a regional or national examining body. The examinations of the National Union of Teachers were officially condemned in 1928, partly because they were the unfashionable single-subject examinations, but also because there were no outside representative elements. The tests of the Faculty of Teachers in Commerce were also rejected for this reason.[1] Official policy was to back examinations that were widely representative.

Another attractive feature was the supreme flexibility of the further education examinations, a factor that was lacking in most other spheres of examination. The organization had to be flexible because of the immense variety of trades, vocations and professions. There had to be delegation on a large scale, whether from local authority to examining union, from examining board to its subject committees, from committees to examiners, assessors and moderators, or from professions to examining bodies. Standards varied from trade to trade and from region to region, and they varied with time also. Examination systems reflected the complicated structure of industry and, being complex in themselves, were in many ways finely adjusted to the tasks which they had to perform.

A weakness of such complicated pieces of machinery was that they could be at the mercy of forces beyond their control. Pressure to provide examinations suitable for secondary modern school pupils, partly to facilitate transfer from secondary to further education, and partly to improve morale within the schools, led to regional examining boards quickly introducing examinations that were not necessarily best suited to the task. Again, the distressing wastage from National Certificate and other courses was apparently accepted for decades as something inevitable. Only by the Government and Industry providing the attractive alternatives of full-time education and sandwich courses, with palatial buildings erected at vast expense, could the system be improved rapidly. In this respect, however, it was less the system of examinations that was at fault than the fact that further education was largely for voluntary part-time students, working in the evenings. Finally, professional and technical examining bodies of all descriptions could be criticized for encouraging narrowly technical work, and for increasing unnecessarily the factual content of specialist education.[2] There was a slowly growing awareness of the need for a sound general education.

[1] *Report of the Departmental Committee on Examinations for Part-Time Students*, 1928, pp. 58–59.

[2] National Institute of Adult Education: *Liberal Education in a Technical Age*, 1955, p. 119.

4. EXAMINATIONS FOR TEACHERS

Some fairly detailed description of the examinations used in the training of teachers can be justified even when the treatment of examinations for other occupations and professions has to be limited for want of space. The large numbers involved resulted in regional forms of organization, with lavish use of delegation, that were rare in other individual professions.

Some mention has already been made of the part played by examinations in the nineteenth century in helping to train teachers.[1] Two-thirds of the central education grant in 1854 depended on the results of examinations carried out by inspectors, whether of pupil-teachers for Queen's Scholarships, or for Certificates of Merit for practising teachers and qualified students.[2] It was realized from the very start of state intervention that an adequate supply of competent teachers was the key to a full elementary education system, and examinations were to play a vital part in qualifying candidates. An element of competition was present in the second half of the century for, after 1856, there were always more pupil-teachers than there were training college places, and competition existed too at an earlier age, amongst candidates for pupil-teachers' posts.[3] So many students left college at the end of only one year that after 1856 it was arranged that grants should be paid only on behalf of those who successfully completed a two-year course; those leaving after one year were uncertificated.[4] The two-year course that was established in this way was to last for a century, though smaller numbers over the years took three- or four-year courses, generally in connection with university examinations.

The training college syllabus was governed to a large extent by the examinations set by the central inspectors. The system in the 1880s depended upon examinations at the end of each year in general school subjects similar to those for the Queen's Scholarships. There were, however, papers on 'school management' in the first year, and alternative papers in science, political economy, or languages in the second.[5] The art examinations of the Science and Art Department were also available.

A wider conception of the use of examinations stemmed from the central recognition of day training colleges connected with the universities. The Report of the Commission on Elementary Education in 1888 suggested that experiment was called for, on a limited scale, to admit day students both to the ordinary residential colleges and to new institutions at the universities.[6] There was an urgent need for more qualified teachers at this time, and the Government made it possible for such

[1] See Chapter 2.

[2] *Reports of the Committees of Inquiry into Public Offices and Papers Connected Therewith* (C. 1715), 1854, p. 233.

[3] *Report of the Board of Education for the year 1912–13* (Cd. 7341), p. 17.

[4] Minutes of the Committee of Council on Education, 1856–57, p. 3.

[5] *Report of the Board of Education for the Year 1912–13* (Cd. 7341), p. 19.

[6] *Final Report of the Commissioners Appointed to Inquire into the Elementary Education Acts* (C. 5485), 1888, p. 211.

provision to rank for grant purposes in 1890.[1] King's College, London, and five other university institutions were immediately recognized, and most of the universities and provincial university colleges joined in within a few years. There were over 2,000 students being trained in day colleges by 1903.[2] The students were at first intended to receive two years' training only, but this was often extended to three or four years. Indeed, the day training colleges were to be linked with those university departments training secondary school teachers. This matter was little developed before the First World War, though the Teachers' Training Syndicate of Cambridge University had been formed as early as 1879, and similar arrangements had been made elsewhere.[3]

The New Code of 1891 drew a distinction between day and residential training colleges.[4] The former were attached to universities or colleges of university rank, and it was probably because of this that more freedom in determining their courses of study was later to be extended to the ordinary residential colleges. The original Circular of May 1890 required all day training college students to pass the examination prescribed in the Education Department's syllabus for reading, recitation, teaching, and school management, but college examinations were acceptable in all other subjects. The college examinations had to be comparable with those of the Education Department, and the questions, marks, and worked papers had to be sent to the Department so that they might be checked. Residential training college students had no option but to take the Department's examinations at this period.[5] A small number of students in the residential colleges sat for university degree examinations, just as a larger proportion did at the day training colleges. Such residential students were thus put at a relative disadvantage, having to work for two sets of examinations at once, and new regulations had to be issued at the end of 1890, which were to apply to all types of college. Every student had to take the technical subjects of his future profession under the new Regulations, but Part II of the Department's Examination in academic subjects might be replaced by an approved British university examination.[6]

Students in day colleges frequently attended university classes because of the convenience, or because they wished to work towards a degree. Not all of the day colleges worked closely with their universities and by June 1891 the central authority came to realize that some of the colleges were setting examinations without reference to the universities, and without arranging for external examiners or having other safeguards of this sort.[7] In fact, professors in the colleges were proposing to set their own examinations themselves. The Circular made it clear that, while all university examinations were to be accepted 'without further question', the college examinations which were not conducted under university auspices were put on a much less privileged footing.[1] It is worth remarking that central grants were given to colleges upon the results of the Certificate Examination, so that the Board's excessive caution may be excused.[2]

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[1] *Report of the Committee of Council on Education* 1889–90 (C. 6079–1), pp. 205 ff.

[2] Cd. 7341, p. 29.

[3] L. G. E. Jones: *The Training of Teachers in England and Wales*, 1924, pp. 29–31.

[4] *Report of the Committee of Council on Education 1890–91* (C. 6438–1). The New Code (1891), pp. 138–40.

[5] Ibid. Mr Oakeley's Report for 1890, p. 421.

[6] Ibid.

[7] Education Department Circular 303, 8 June 1891.

Further responsibility was to be granted to colleges ten years later. The want of originality, of individuality and resource in training college students had been noted by a Departmental Committee which commented on their mechanical habits of thought.[3] The teaching staff of the colleges were therefore given increased freedom in arranging curricula and testing the results of instruction. The first year's external examination was abolished in 1902, and a new one at the level of the old second year examination was to be introduced upon a course of study for which the individual colleges were to have some responsibility. Specimen courses of instruction were circulated to guide the colleges.[4]

Under the new scheme, the seven 'curriculum subjects' of the former Part I course were to be examined still; these included, for example, reading and recitation. The Board was to set the papers, and these were to provide a means of comparison between the colleges. The 'academic' subjects from the old Part II course were to be examined, together with more advanced optional subjects; the Board of Education was to conduct these examinations in the majority of cases, on syllabuses which might be set specially for the individual residential colleges. The college authorities themselves were to be responsible in the day training colleges, and inspection by the Board was intended to secure parity.[5] Some element of cooperation was therefore introduced between the college staffs and the Board's inspectors; the seeds of delegation and of self-government were sown in colleges of all descriptions. Less advantage was taken of this than might have been expected, for of a total of 5,419 two year students qualifying in 1920–21, only 1,237 were examined by their colleges; 305 sat for a university examination, while 3,877 were examined by the Board of Education.[6]

It was in the 1920s that the training college staffs began to organize themselves into subject-sections of their own association, and only then could they begin to criticize the Board's examinations effectively.[7] It was not merely lack of breadth in the curriculum that was felt to be in need of reform at this period. In 1922 the National Association of Head Teachers called for the Teacher's Certificate examination to come under the control of the Teachers' Registration Council.[8] The fundamental control of the examinations themselves was being questioned.

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[1] M. E. Sadler: *University Day Training Colleges, Their Origin, Growth and Influence in English Education*. 'The Department of Education in the University of Manchester, 1890–1911'. 1911, p. 38.

[2] The New Code (1891), p. 139.

[3] Board of Education Circular 454, 1901. Extracts from the Departmental Committee's Report.

[4] Board of Education. Specimen Courses of Instruction for Training Colleges suggested by the Board of Education, August 1901.

[5] *Report of the Board of Education for the Year 1903–04* (Cd. 2271), pp. 51–52.

[6] *Board of Education Report, 1920–21* (Cmd. 1718), p. 54.

[7] L. G. E. Jones: op. cit. p. 86.

[8] Ibid. p. 367.

The general method of examination just after the First World War was for specialist inspectors from the Board of Education to visit the residential colleges to set papers in the general subjects, such as mathematics and history. The college staffs participated in the examination of professional subjects, being asked by the inspectors about marks and attendances during the course, and being consulted over the doubtful cases.[1] The extent of the cooperation may be gauged from the fact that 240 out of 587 candidates deferred by the Board were allowed to pass on the recommendation of the college staffs in 1920–21.[2] Somewhat different schemes had to be arranged for Froebel and domestic science colleges. In the former, for example, examiners were appointed by the Froebel Union to cooperate with the staff, and the final awards were made by an examinations board containing representatives of the college, and of the Board of Education.[3] Details varied from college to college, and the examination systems had to be flexible to take into account the needs of minority groups, such as certificated students taking one year courses.

Certain residential colleges were beginning to conduct their own final examinations with help from the universities. Liverpool University developed this method in 1919, when it established a system of examinations for three local training colleges. The examinations were under the control of a Committee of the Senate of the University which appointed internal examiners from the colleges and external examiners from the teachers in the University. Syllabuses, examination papers and results had to be approved by the Committee and by the Board of Education, which was represented throughout by an assessor.[4] Bangor University College helped the Bangor North Wales Training College similarly, and London University held examinations for those students at Goldsmiths' College who were not preparing for degrees.[5] The principles followed the lines laid down in Circular 454, in 1901.

There was some preliminary discussion of a scheme to cover the London colleges as a whole by 1925, when a Departmental Committee reported on the subject of teacher-training.[6] This Committee favoured joint examination boards of colleges or groups of colleges, composed of representatives nominated by the governing bodies of the local universities and training colleges. These institutions were to provide the boards' external and internal examiners respectively, as at Liverpool, and the examinations were to be conducted through panels of examiners.[7] The universities could thus fully lend their academic prestige to the examination of budding teachers, though their competence to test the professional studies was queried.

The Report was followed swiftly by a circular announcing the Board of Education's agreement with the proposal to end the central examination in academic subjects.[8] This was a move to give more control to the colleges, to give them greater autonomy, and to fit the examinations to the actual needs. The Board of Education asked the college authorities to submit proposals for alternative methods of examining, with the Departmental Committee's suggestions in mind.[1]

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[1] L. G. E. Jones: op. cit. p. 100.

[2] Cmd. 1718, p. 55.

[3] L. G. E. Jones: op. cit. p. 152.

[4] Ibid. p. 100.

[5] Board of Education. *Report of a Departmental Committee on the Training of Teachers for Public Elementary Schools* (Cmd. 2409), 1925, pp. 107–8.

[6] Ibid. pp. 107–8.

[7] Ibid. p. 108.

[8] Board of Education Circular 1372, 11 December 1925.

The Council of Vice-Chancellors of Universities called for a conference in 1926, inviting representatives of universities, university colleges, local education authorities and training colleges, in addition to those of the Board.[2] A series of conferences followed, in which the Board appeared to show itself more anxious to relinquish its load than the other parties sometimes wished. The Board was to continue to satisfy itself as to the training colleges' efficiency by inspection and by retaining the responsibility of testing students in practical teaching and, if so desired by the new examining bodies, by inspecting the so-called 'practical' subjects.

Seven schemes of examinations were submitted to the Board for approval in the following year, and several were scheduled to begin in 1929.[3] All were associated with the areas surrounding the universities or university colleges with which they were connected. Further regional schemes were adopted in 1928 so that, apart from the Eastern Counties which Cambridge University was not inclined to help fully, the whole country was covered.[4] Certain colleges, Goldsmiths' College, and those of the Froebel Union, were left out, but the majority were involved in one scheme or another.

The Board of Education had to secure uniform standards among the different bodies which had sprung up so quickly, with little chance for cooperation or exchange of experience. Inspectors were detailed for the task.[5] A more satisfactory arrangement was secured in 1930 when a Central Advisory Committee for the Certification of Teachers was established, to maintain a general parity of standards. Of the 24 members nominated by their associations, eight were from universities, four from the governing bodies of non-university training colleges, four from the teaching staffs of training colleges, and four from the teaching profession as a whole.[6] At the central, as well as at the regional level, the teachers involved had some greater say than previously in determining the nature of the examinations and thus of forming their curricula. The changes were helped by new grant regulations following the 1918 Education Act, which separated the training college grant from results in the examinations.[7]

The regional boards strengthened themselves and developed in the years before the Second World War, but their success was limited. They remained examining bodies only, allowing little interplay between the various units participating in the schemes. Colleges and departments of education in the universities remained quite distinct, there were no new constitutional developments to integrate the teacher-training institutions, and there was little sharing of facilities. Cooperation with the schools and even with the teachers was slight.[1] The distribution of training colleges, too, was unplanned, with unfortunate consequences for the pattern of the ten existing regional schemes.[2]

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[1] *Education in England and Wales, 1925–26* (Cmd. 2866), p. 98.

[2] Ibid.

[3] *Education in England and Wales, 1926–27* (Cmd. 3091), p. 55.

[4] *Education in 1928* (Cmd. 3307), p. 56.

[5] Ibid. p. 57.

[6] Board of Education Circular 1408, 20 August 1930. Central Advisory Committee for the Certification of Teachers.

[7] Education Act, 1918, Section 44.

Closer links between the training colleges and the universities were called for periodically. Thus, it was at one time proposed that training colleges should be attached to the universities as tightly as Goldsmiths' College was linked to the University of London, or at least that there should be closer arrangements between the various institutions, with shared facilities.[3] Parity of esteem between training college and university graduates was one of the prizes to be sought.

The result of such discussion was that the idea of examining training college students with the help of joint examining boards came to be generalized and improved after 1944. It was in this year that the Committee on Teachers and Youth Leaders sketched the future needs in this field. There were many suggestions in its important Report for improving the supply and training of teachers, and one of the recommendations was that new 'area training organizations' should be established in the regions surrounding universities, to coordinate the facilities of every description which were to be so strained by the large demand for teachers after the War.[4]

These organizations would be saddled with a considerable amount of power in respect of their examining, as well as in other ways, and the best basis for administration was a matter of dispute. One scheme proposed in the 1944 Report (and known as 'Scheme A') was that universities should become responsible for 'schools of education', which were to have financial, administrative and examining functions in connection with the training of teachers. The university was to form a delegacy for the purpose, but the organization was to be managed by a director and a 'professional board' made up of university teachers and certain training college lecturers.[5] The university could thus take other approved institutions under its wing, and lend them the weight of its authority, while they, the local education authorities, and serving teachers in the area, were to have some say in the operation of the scheme. The individual colleges could thus be strongly represented upon the committees which arranged the examinations.

The second scheme, the 'joint board scheme', allowed the individual institutions to retain more of their own identities.[6] This 'Scheme B', as it came to be known, was an immediate extension of the joint examining boards which had been operating for some years. It appealed to those who wished the universities to steer clear of the responsibility of managing a 'Scheme A' type of system, which seemed likely to make university-sponsored organizations rely heavily on Government funds, and implied lack of independence.

The universities were asked to tell the Minister the nature and extent of the

[1] Board of Education. *Teachers and Youth Leaders*, 1944, p. 49.

[2] Ibid. p. 16.

[3] R. A. C. Oliver: *The Training of Teachers in Universities*, 1943, pp. 49–53.

[4] *Teachers and Youth Leaders*, 1944, p. 45.

[5] Ibid. p. 52.

[6] Ibid. pp. 54–62.

responsibilities that they were prepared to adopt in training teachers, and to say how they wished to cooperate with the training colleges, teachers, and local education authorities.[1] Various proposals were returned to her, including some for a third general type of scheme, which was to be termed 'Scheme C'. In this third alternative it was proposed that 'institutes of education' should be centred on university towns, but arranged independently of the universities. Training colleges and university departments of education alike were to be united loosely under Government-financed bodies which were to be governed by committees of members connected with the constituent institutions.

The Minister was willing to accept a variety of organizations. In some cases the university would take the initiative, the 'school of education' being financed through the University Grants Committee. The Ministry would bear the cost of any 'independent joint bodies' not sponsored by the universities.[2] 'Scheme A' organizations were set up in Birmingham and Bristol in 1947, and also at the University Colleges of Nottingham and Southampton. Nine more were established in the following year, including the one at London, while Leicester University College Institute of Education was also established with rather limited powers. 'Scheme C' organizations were inaugurated at Reading, Cambridge and Liverpool.[3] Even Oxford was to have its Institute in 1951, though very few training colleges were involved. The London Institute of Education scheme will serve to illustrate the way in which a large 'Scheme A' plan was put into practice. The London University Senate was in overall control of the work, being able to admit training colleges as 'constituent colleges' of the Institute or to allow parts of the University itself to be listed as 'constituent departments'. These constituent parts had to conform to certain standards in their organization. They were to remain virtually independent as before in most ways, control being retained by the Senate's power of giving or withholding recognition for membership. The Senate was advised by a more widely representative 'Council of the Institute', made up of between fifty and sixty representatives. Ten of these represented the principals of the constituent elements and were elected by the 'Committee of Principals'. Ten were nominees of the 'Teachers of the Institute', elected by the 'Academic Board'; eight were elected by the local education authorities of the area, who met at an annual conference for this and for other matters. Six represented the various unions of practising teachers; four came on behalf of the voluntary bodies which had played such a large part in the training of teachers; two Ministry of Education nominees also participated. There were twelve other persons, some nominated by the Academic Council and by the Collegiate Council, in addition to the principal officers of the University and of the Institute.[4]

The work was further delegated. A 'Committee of Management' was appointed by the Senate to run the central activities of the Institute, and an 'Academic Board' was to advise the Council upon matters connected with the admission and examination of students.[1] This Board was to consist of all professors and readers, thirty 'Teachers of the Institute', elected by the lecturers and teachers who had reached this defined status, and six coopted members. Matters of examination were thus delegated to a committee of teachers in the colleges and departments, which in turn could appoint 'Standing Sub-Committees' to advise them further in special fields; there were 22 such committees by 1960–61, and every 'Teacher of the Institute' sat on at least one of them, so that there was wide representation.

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[1] Ministry of Education Circular 112, 11 June 1946. Organization of the Training of Teachers.

[2] Ibid.

[3] *Education in 1948* (Cmd. 7724), pp. 55–56.

[4] Scheme for the University of London Institute of Education, Regulations. *London University Institute of Education Handbook, 1960–61*, pp. 94–96.

The complexity of the structure is now fully apparent. Standing Sub-Committees made recommendations to the Academic Board, which had to advise the Council on relevant matters. The Council, a creature of the University Senate, but widely representative of all interested parties, exercised further powers by virtue of its duty to make recommendations for 'qualified teacher' status to the Ministry of Education. Only qualified teachers could become permanent members of state primary and secondary schools, earning the full rate of pay. A certain theoretical power could thus be exercised over the constituent colleges and departments which was not directly financial. The Council could control the constituent parts by visitations to check on unsatisfactory arrangements, yet it could not interfere in internal affairs. Examinations played a vital part here, for Council recognition of students for qualified teacher status affected the colleges very directly.

The arrangements for examinations were in some ways less staightforward than those for the General Certificate of Education, reflecting the intricate framework of the Institute's constitution. The Senate could approve courses of instruction and syllabuses submitted by the colleges or departments, and could conduct examinaations itself.[2] The examiners were, in fact, appointed on the recommendation of the Standing Sub-Committees in individual subjects. College authorities were required to certify for each candidate that he had pursued an approved course of study satisfactorily for a Teacher's Certificate, and that an adequate level had been reached in subjects that would be used by him as a teacher, including written and spoken English. An account of progress in practical teaching was involved. Common examinations, arranged for groups of colleges, were held in the theory and practice of education, and also in special fields such as mathematics or divinity.[3] Optional papers, and approved special papers, made this system still more flexible. It was thus possible to have an examination which was partly internal and partly external to the colleges. The purely external papers had the advantage of providing a more obvious incentive to the students. The internal assessments were extremely useful in ensuring that the personal progress of each student was evaluated with care by the lecturers who had charge of him.

The flexible approach which admitted such diverse institutions as the Chelsea College of Physical Education (for women), St Mary's College at Twickenham

[1] Scheme for the University of London Institute of Education, Regulations. *London University Institute of Education Handbook, 1960–61*, pp. 97–98.

[2] Ibid. p. 101.

[3] Ibid. pp. 122–23.

(which was a Roman Catholic institution), the Froebel Educational Institute, and the Battersea College of Domestic Science, in addition to the more usual Church of England or local authority colleges, had something to recommend it. Standards may have varied somewhat from subject to subject or from college to college, but the Institute's examinations served their purpose of qualifying teachers, relying upon the college lecturers not to give assessments which were based upon emotional or personal grounds. There was some danger of this happening when failure in the Teacher's Certificate examination implied that the candidate would have to begin teaching at a lower salary than his qualified colleague, bearing in mind that training college courses had little formal relevance to anything but teaching. However, academic boards within the colleges, composed of all the lecturers, took the responsibility of assessing students, and their meetings made it possible to discuss the general suitability of the students as persons. The complicated machinery of delegation was necessary to achieve ends of this sort which would have been quite impossible with a more straightforward examination system.

It was customary in most areas to divide the courses roughly into three parts. 'Main subject courses' provided the student with the opportunity of furthering his education in one or two special subjects. 'Curriculum courses' were of more direct application to the student's future occupation, and 'education' courses dealt with the theory and practice of education. These terms varied from one area to another in actual significance.[1] The London University Institute of Education set examinations in the first and third of these divisions, but left the examination of curriculum subjects to the individual colleges themselves.[2] The first of the students leaving the training colleges under the new three year courses sat for their final examinations in 1963. New examination schemes had to be prepared for them but although the details of the courses differed, the principles remained unchanged.[3] There was, for example, a great extension of the use of options in mathematics, so that fresh topics such as 'vectors' or 'modern algebra' could be taught where this was felt necessary.

The Oxford University Institute of Education was a much smaller organization, and was established by a Statute approved by Congregation in January 1951.[4] One of its main duties was to recommend students to the Ministry for recognition as qualified teachers, a matter which implied examination. Only three colleges were united with the University Department of Education, but facilities for delegation of authority to the colleges were available. Thus, at Bletchley College, a student was to have had practical experience in schools for at least twelve weeks, and he was required to follow his course diligently. Institute examiners were to assess ability in teaching and in professional subjects; but a 'Professional Committee' might also permit written examinations to be supplemented by assessment of work throughout the course, and by *viva voce* examinations. General subjects were assessed with the help of the General Certificate of Education examinations.[1]

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[1] Ministry of Education Pamphlet No. 34. *The Training of Teachers, Suggestions for a three year training college course*, 1957, pp. 6–7.

[2] University of London Institute of Education. Regulations and Syllabuses for the Teacher's Certificate Examination, 1956–57, pp. 10–11.

[3] University of London Institute of Education. Revised Regulations and Syllabuses for the Teacher's Certificate, 1963, pp. 10–12.

[4] *Oxford University Institute of Education Handbook*, 1955, p. 3.

Management of the Oxford Institute was to be entrusted to a Delegacy, composed of university and local authority representatives and training college principals; representatives of training college staffs were to be included to give advice on the courses and examinations.[2]

The Certificate of Education issued by the University of Bristol Institute of Education was based on continuous assessment, rather than on examinations at the termination of courses.[3] Special emphasis could thus be laid on written and other course work, and practical teaching, besides periodical tests and examinations. Syllabuses for the main subjects were published for the individual colleges, but the colleges made their own recommendations to the Board of Examiners for the award of certificates. The whole scheme was thus similarly arranged to the curriculum courses of the London Institute, where delegation was made to the colleges.

The Committee on Higher Education which reported in 1963 called for a strengthening of the area training organizations. It was hoped that these would become 'university schools of education'. Degrees and certificates granted to students in training colleges (now to be called 'colleges of education') were to be arranged by each 'school of education'.[4] A four year degree course was envisaged, not unlike that which could be taken already at certain colleges in the London area.[5] It was not expected that all would sit for this 'B.Ed.'; the majority would still look to the usual three year certificate course. There was a prospect of stronger links being forged between each institute and its colleges for, beside the colleges being represented on academic boards for degree as well as for certificate work, it was intended to achieve much broader administrative liaison.

With the institutes of education had come complete delegation of examining functions by the central authority. Even practical teaching, the examination of which had been retained in the hands of H.M. Inspectors under the joint examining board system before the creation of the institutes, was now in the care of these area training organizations, and thus effectively in the hands of those who taught the students. One of the consequences was that the courses could be much more flexible and adaptable to local conditions than previously. There could be few criticisms of a narrow curriculum imposed from above, such as had existed in 1900, when delegation was still limited, and individuality on the part of the colleges kept closely checked.

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[1] Oxford University Institute of Education Handbook, 1955, p. 23.

[2] Ibid. pp. 7–10.

[3] University of Bristol Institute of Education. *Certificate of Education and Supplementary Certificate; Handbook of Regulations, Courses of Study and Syllabuses*, October 1962, p. 5.

[4] *Report of the Committee on Higher Education* (Cmnd. 2154), 1963, p. 119.

[5] Ibid. p. 112.

CHAPTER NINE

Some Reflections on the History of Examinations

I. EXAMINATIONS AS INSTRUMENTS FOR A PURPOSE

The limited scope of the early examinations compares strikingly with that of the vast modern organizations. Not only have the candidates increased in numbers from the handful to the horde, but also the complex and interlocking systems of the present day dwarf their predecessors, which were designed more simply, and for more specific purposes. The earlier examinations were intended for limited and particular ends, but modern examinations were to carry the weight of widely accepted principles which, though more often accepted implicitly rather than explicitly, concerned the very nature of society itself.

Modern examinations developed continuously from their earlier counterparts. It is not, therefore, possible to look upon the examinations introduced at Cambridge and at Oxford in the eighteenth and nineteenth centuries as interesting oddities, of only antiquarian interest. The peculiar customs of the Society of Arts, which involved the distribution of prizes and medals for worthwhile attainment, may scarcely be described as no more than generous, entertaining, but irrelevant facts. It is only when it is realized that from such sources as these sprang the methods which were ultimately to change the shape of society, that it is possible to marvel at them. These early examinations may be likened to the proverbial grain of mustard seed.

The strictly limited aims of the earliest systems of examinations at Oxford and Cambridge have already been demonstrated.[1] Raised standards were demanded by parties both within and without the universities, and competitive examinations provided a convenient way of achieving them. The natural competitiveness of youth, observable in sports and games, was harnessed ingeniously to academic ends. College scholarships and fellowships, honours degrees and prizes, all came to be awarded on the results of examinations. Examinations were, of course, not the only accelerating factors in the expansion of opportunity and the raising of standards; they were but one of the means used to achieve the transformation from Georgian statics to Victorian dynamics. The influence of great men and their books, the inspiration derived from teachers, from men of action and men of affairs, the urge to self-improvement on the part of the students, all contributed to the advancement of learning and to a more cultured community. It is significant, nevertheless, that the advances in education and in technical achievement went hand in hand with the development of examination systems.

Competitive examinations led to a general increase in specialist competence, and university honours graduates possessed a very real advantage in this respect over their fellows in the nineteenth century. The benefits bestowed by examinations should not, however, be exaggerated. The engineer, George Stephenson, made his discoveries without a formal education, and there were many like him at the beginning of the industrial revolution.[1] Even a student at Cambridge who shunned the tripos examinations because of the envy that competitive success engendered could achieve renown, as William Wordsworth did, who entered St John's College in 1787.[2] To an ever-increasing extent, however, it became the custom for the abler students to seek to win honours at the universities, with an eye to responsible employment in public or academic life. Government posts were specifically earmarked for those who were 'high in honours at a university', or who had passed similar competitive examinations.[3] This had a cumulative effect, for graduates tended to perpetuate the type of examination system in which they had been successful. It was this cumulative effect, the result of giving first honour, and then public responsibility, to the ablest and best educated, which did so much to broadcast the examinations.

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[1] See Chapter 1.

It was, perhaps, only natural to achieve reform at the universities by introducing competitive examinations for honours courses. Men such as Thomas Acland and Frederick Temple, who had succeeded in these, were the very ones who introduced the Oxford University Local Examinations in an attempt to raise secondary school standards.[4] Reforms in the Civil Service were pressed by those, such as Lowe, Macaulay and Gladstone who realized, from their own experiences at the universities, the great power of competitive examinations in stimulating effort.[5] The elementary education system came under the influence of men like Temple and Lingen while the Revised Code of 1861 was to bring the influence of the Oxford and Cambridge graduates to bear upon examinations for the masses.[6] Oxford and Cambridge were like islands of culture in a sea of ignorance. Their influence spread far beyond their shores, for the graduates acted as colonists, or even as missionaries, frequently using examinations to achieve their ends.

The movement to spread competitive examinations was clearly visible, but there was little evidence of widespread planning. There was no 'take-over bid' by the universities to manage the nation's public affairs, however their graduates may have envisaged their own careers personally. The examinations were introduced for specific purposes, as instruments to achieve certain ends, just as those in the Civil Service were promoted to curb patronage. After 1846, examinations in the elementary education service, having grants linked with them, were intended to stimulate the provision of better-qualified teachers. Examinations were useful in that differences of religion could be placed to one side, whereas other control would sometimes have proved unthinkable: they helped to bridge the gap between the Church and the Radicals. Again, examinations were to help in reforming the endowed schools when Government interference in their affairs was distrusted. These are just a few of the many ways which have been described earlier, in which examinations were used for administrative purposes. The emerging principle that the ablest should be given opportunity to develop their talents came to be linked closely with the use of competitive examinations. With the full expression of this principle, the administrative purposes came to be obscured, and examinations came to mean little more than the grading of vast numbers of candidates.

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[1] 'George Stephenson': *The Dictionary of National Biography*.

[2] M. Moorman: *William Wordsworth*, 1957, pp. 86–99.

[3] *Reports of the Committee of Inquiry into Public Offices, and Papers Connected Therewith* (C. 1715), 1854, p. 239.

[4] See Chapter 3.

[5] See Chapter 2.

[6] See Chapter 2.

In a later, and more scientific age, examinations could be designed to have special characteristics. Three types were distinguished by science teachers in 1958.[1] First there were 'indicative' tests, to assess progress and attainment. Then there were 'diagnostic' tests to reveal strengths and weaknesses. Thirdly there were 'prognostic' tests to determine the capacities of candidates for further studies. These were the kinds of tools available to examiners, who could apply them in such a way as to achieve the information required. Essay-type questions were used in science, as were objective and practical tests. Oral examinations were given in other subjects. It was stated that the G.C.E. was mainly 'indicative', that internal school tests tended to be 'diagnostic', and that the examinations for scholarships and for the professional bodies were essentially 'prognostic' in quality. Examinations could be arranged to fulfil the diverse functions for which they were needed, and this flexibility helped to account for their wide and continued use.

The science of examining had advanced considerably between 1858 and 1958. At the former date, examining implied little more than setting the candidates in rank order. The methods had developed immensely a century later, to satisfy the administrative needs much more fully. It was now realized, for example, that a rank order formed on the basis of sixth-form work might differ from one designed to gauge future success at the university. Better solutions could thus be provided for administrative problems which, though they altered vastly over the years, had a certain air of permanence. Large numbers of people continued to compete for small numbers of places, and young people still needed to qualify for their professions.

2. FROM EXPEDIENCY TO PRINCIPLE

Oxford and Cambridge Universities were preeminent in examining throughout the nineteenth century. Whether directly or through their *alumni*, their methods were destined to influence public organizations of every sort. If these universities were to appear any less important, relatively, in the twentieth century, it was because they had been too successful. The colonies, so to speak, had prospered more spectacularly than their mother-country. The examination systems of the mid-nineteenth century dealt with hundreds, and those of a century later with tens of thousands.

The examining machinery of the Education Office itself helped to produce teachers who would use examinations in schools; thus, and in other ways, was support for examinations gained from those who had not themselves been to a university. New universities and colleges sprang up, which owed less to Oxford than to London University. Technical education demanded examination, and the ancient universities held aloof. There appeared, then, a second generation of examination enthusiasts, not influenced directly by the customs and methods of Oxford and Cambridge, but adopting some of their quite recently acquired principles.

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[1] *The Teaching of Science in Secondary Schools*, compiled by a Joint Committee of the Incorporated Association of Assistant Masters and the Science Masters' Association, 1958, pp. 191–94.

The second generation of examinations, if it may be described as such, was often to appear in Radical colours, and was generally characterized by much larger numbers of candidates. The Civil Service examinations which were urged by the Benthamites were intended to alter the existing system by applying competitive stimuli, and nearly 40,000 men were examined annually by 1900.[1] The Revised Code, a concept of second-generation Utilitarians, was brought to bear upon all elementary school children of certain ages and class, and was thus indeed applied to the masses. Later still, the demand for widened educational opportunity brought into being the 'eleven plus' examination, a highly developed machine which again introduced written examinations to very large numbers of young children. When such vast numbers were involved, the element of personal competition, such as that which had existed in the early university honours competitions, vanished. The examinations could then take on the form of qualifying examinations in one sense, in that there was often a reasonably stable pass standard, as in the G.C.E. It should be borne in mind also that competition in the 'eleven plus' tests existed not so much because of the nature of the examinations as because of the small number of grammar school places relative to the demand for them.

Local and central government organizations played a very important part in propagating examinations, once the way had been pioneered. In the early days the approach was purely competitive, to secure raised standards. The Civil Service examinations were influential, for example, and the Certificate of Merit and pupil-teachers' examinations were fundamentally competitive. Secondary education was developed independently of the State until much later, but when the Government acted to reform the endowed and public schools, it was arranged that they should have their pupils examined by the university examining boards, whose methods were influenced by those of the honours degree competitions.[2] The 'free place' scheme which was fostered by the Liberal Parliament of 1906 was to encourage competition on a much larger scale.[3]

With the beginning of payment by results, and of other massive Government involvement, the earlier feelings for the benefits of competition for competition's sake receded a little. The Government had been obliged to take drastic steps because of the pressure of events beyond their control. Teachers were in short supply in the 1840s, and steps had to be taken to train them: examinations came into their own. Comparison with continental countries was the moving force which led to successive developments in technical education, first with schools of design, and later with schools of art at the time of the 1851 Exhibition. The new Department of Science and Art encouraged teachers to qualify by grants which were linked to their examination performance. The students, too, were soon to be subject to a system of payment by results. The Board of Education, which had by then taken over the work of the Science and Art Department, could boast of dealing with 165,000 examination papers in 1904.[1] Later policy was to place technical and similar examinations rather more in the hands of the local authorities and the colleges, but the Government continued to take the initiative. The National Certificate schemes were direct results of central action. The nation's position with respect to its commercial competitors still caused concern, and the Government continued to compare facilities for technical education with provision abroad.[2]

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[1] *Forty-Fourth Report of Her Majesty's Civil Service Commissioners* (Cd. 271), 1900.

[2] See Chapter 3.

[3] See Chapter 5.

If the need to keep ahead of competitors as an industrial nation was one of the forces which moved the Government to help develop the educational system by the use of examinations, another was the growing demand for better educational facilities for the poorer classes of society. Even free university education was foreseeable, after free elementary and secondary education had been made possible. The liberal attitude that every man deserved to be educated to the best of his ability was slowly seen to be in the national interest, and was not just an expensive by-product of democracy. The need to make the best use of the available manpower of the country was important, if it was to keep on equal terms with others. It came to be realized, implicitly, that the most efficient form of society was one in which everyone was educated to his full potential. An economical use of brainpower was a logical necessity in a land where technical ability came to be in demand, and opportunity was made readily available for the able.[3] Not only was further education increasingly subsidized for those of sufficient ability, but the scope of education was widened generally and at all levels. The G.C.E. catered for a broader range than its predecessor, the School Certificate. External and internal examinations in the secondary modern schools were expanded, and were to be improved with the new C.S.E. to give opportunity to a greater number. Provision was made for larger numbers of technicians to back up the technologists. The examinations, being administrative instruments, reflected central policy.

The examinations sorted and graded pupils and students in growing numbers, and with ever-increasing thoroughness. Formal definitions of status were made in the 1950s, when differentiation was made between technologists, technicians, craftsmen and operatives and this was symptomatic of a concern current at the time, for the examinations tended to assist in the formation of a functional society.[4] Emphasis on skill was shifting away from the factory floor to the planning and preparatory stages of manufacture, creating a demand for men educated in the principles rather than trained in the practices of productive work.[5] The examination systems served to measure the attainments of such highly specialized men as were needed in greater numbers. Training schemes were organized by public service departments and by the great business corporations, from the end of the First World War onwards.[6]

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[1] *Report of the Board of Education for the Year 1903–04* (Cd. 2271), p. 65.

[2] Ministry of Education. *Technical Education* (Cmd. 9703), 1956, Appendix A, pp. 38 ff.

[3] *Report of the Central Advisory Council for Education*, 1959, pp. 45–54.

[4] Ibid. pp. 327–28.

[5] K. Liepmann: *Apprenticeship — An Enquiry into its Adequacy under Modern Conditions*, 1960, pp. 19–20.

[6] Royal Institute of Public Administration: *Training Managers in the Public Services*, 1955, pp. 2–6.

Society was changing. The electronics technician, the hospital almoner, the lorry driver, and the physical education teacher were specialists. Each carried out a function for which he had been educated and trained. Such a functionalism, though less emphasized in the nineteenth century, was clearly apparent in the Middle Ages. The modern differed from the medieval version in that it was based more markedly upon individual opportunity being made available to each person to develop his talents to the utmost.

One of the great contributions to educational thought and practice in the nineteenth century was the idea of a liberal education; that is, a non-specialist education to equip the free man for living rightly. This was ably put by men such as John Henry (later Cardinal) Newman, whose ideas on education were strongly formed by his experiences at Oxford University.[1] The well-balanced man, of sound judgment, was the desired end-product of such an education. The common factor in the middle and upper-class education of those days was an understanding of the classics, but classical education was to lose its following by the mid-twentieth century. The demands of the market were for mathematicians and scientists, and such students were produced in great numbers. The traditional liberal education, at its rare best, was well-balanced, and concern over lack of balance in the curriculum of the mid-twentieth century was apparent in the controversies over the general education of sixth formers.[2] But examinations, particularly those for technical and professional qualifications, reflected a demand for specialist competence that pushed to one side the less immediately obvious needs of a balanced education.[3]

It has been shown that examinations were started as isolated expedients to raise standards or to inaugurate a public service. It was not long before examinations became accepted and used in connection with principles. Thus, the precept that education should be freely available to the able implied that some means be found of seeking out and grading suitable candidates. The principle that the Government should encourage technical education in the national interests was linked with the use of examinations. Society came to be based very largely upon principles which required the use of examinations at every stage of education.

Associated with this phenomenon was the question of whether or not the 'pool of talent' was limited. Comparison of the numbers of those able to pass examinations in different localities helped to persuade the public that the pool was not merely a puddle. In the big urban areas, such as Middlesex, where demand for extended education was high, quite large proportions could aim at achieving valuable paper qualifications; this suggested that there were untapped reserves elsewhere.[4] The policy of having single-subject examinations was encouraged centrally, so that not one drop of the precious pool of talent was wasted by a pupil being forced to enter an examination in a subject in which he was weak, and so being 'rejected' unnecessarily.[5]

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[1] H. Tristram (ed.): 'The Idea of a Liberal Education', *A Selection from the Works of Newman*, 1952.

[2] See Chapter 6.

[3] National Institute of Adult Education: *Liberal Education in a Technical Age*, 1955, p. 119.

[4] *Report of the Central Advisory Council for Education*, 1959, pp. 65–66.

[5] See Chapter 7.

Kenneth Lindsay was one of the first to use statistics to make a detailed local enquiry into the effectiveness of the 'educational ladder'.[1] He concluded that the proved ability of at least 40 per cent of the nation's children was being denied expression, and this was at a time when there was high juvenile unemployment. This wastage of talent, as it would now be called, was gradually reduced, and selection and education by ability were extended.

The Barlow Committee Report in 1946 called for a doubled output of scientists.[2] Certain deficiencies were revealed in the provision of opportunity. Only two per cent of the population reached the universities at that time, yet as much as five per cent of the whole population showed, on testing, an intelligence as great as the upper half of the university students.[3] A high proportion of the national reserve of intelligence was therefore expected to be conserved within families unable to afford university education. Opportunity was to be extended widely in this direction over the next two decades, to take up some of the slack in the system.[4] A Report of the Central Advisory Council for Education in 1954 pointed out the large amount of talent that was wasted by able children leaving their schools early, thus denying themselves a fuller education.[5] The social class of the father was shown to be an important factor: the children of manual workers tended to leave school earlier, while those of managers and professional men did relatively better for themselves.[6] A later study extended the enquiry to university entrants, and again showed the disadvantageous position of the offspring of manual workers.[7] Inherited intelligence, a better environment, and different aspirations were some of the possible reasons for the better showing of the children from managerial and professional families. The nation could not, however, afford to have the talents of manual workers' children wasted, and increased grants were soon to come to help to free university education. At the same time, such studies of university entrance applications were to reveal that inefficient selection procedures, together with an unsuitable distribution of university places in relation to entrants, were leading to several thousand qualified persons being excluded from universities while a similar number of places remained empty. Such a state of affairs, once revealed, could not last very long in a society devoted to selecting the able and educating them as fully as possible. The central clearing-house soon came into being.

3. THE SHAPE OF SOCIETY

The consequences of placing the able and well-educated in the more responsible positions were far-reaching. On the credit side there emerged a society vastly more efficient in technology, and materially more affluent because of it. Whereas it may once have been customary to promote employees for personal reasons of friendship or family influence, the modern approach tended to rely more heavily upon repeated assessments of ability, a process which began in the primary school. Competition was visible in life at every level, for proficiency at work was stimulated and rewarded with higher pay. Differential wages attracted the ablest to do the more demanding jobs, and to do them more competently.[1] The debit side will be considered in the next section. It will be shown first that the type of society which developed in this way was variously described by sociologists and others as a 'meritocracy', in that merit was rewarded, as a 'technocracy', in that technical specialization was encouraged, and it was also termed 'managerial', in that power was given to able specialists.

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[1] See Chapter 5.

[2] *Scientific Manpower. Report of a Committee Appointed by the Lord President of the Council* (Cmd. 6824), 1946, p. 8.

[3] Ibid. p. 9.

[4] See Chapter 6.

[5] Ministry of Education. *Early Leaving: A Report of the Central Advisory Council for Education (England)*, 1954.

[6] Ibid. p. 17.

[7] R. K. Kelsall: op. cit. pp. 9–10.

One of the earliest arguments for a functional society was given by Plato, in his *Republic*.[2] Each class, of guardians, soldiers and artisans, was to have its own allotted, specialized functions. The educational system was to help the functionalism by assigning the citizens to suitable roles. The society envisaged was not democratic, for Plato was an aristocrat by birth, and scorned such methods.[3]

Medieval society was functional and feudal, for the guilds which abounded were exclusive, and both the aristocracy and the priests were in clearly defined positions.[4] Education here was entirely vocational, though the higher education leading to the professions could be described as liberal in many senses.[5]

The new society appearing by the twentieth century was also functional, but it came after an interlude. Individualism, and then capitalism which, it has been argued, accompanied puritanism, the essential of the English Reformation, were the forerunners of this new society.[6] The Industrial Revolution, with its factory development, destroyed the old master-apprentice relationship; work became more specialized and less skilled.[7] Unbridled competition now took individualism to an extreme pitch in economic as well as in other spheres, though belief in the all-sufficiency of private enterprise broke down by the end of the nineteenth century.[8] State control began to raise fresh problems in public life. In education, the theory of a liberal education designed for the free man was utilized by the middle and upper classes of society. But it was always challenged by the idea of a technical or vocational education, which was to fit a man for a job. Examinations, once hurdles for individuals to leap, grew more popular, and became devices for selecting entrants to the many specialized occupations. The functionalism of the Middle Ages had, at least, bound an apprentice to a master rather than to a job, and thus tended to cater for the education of the whole man.[9] Modern society was functional, but much of the training after school leaving age was purely vocational; there was a danger of neglecting the fuller education of young people.

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[1] British Institute of Management. *Merit Rating*, 1954.

[2] *The Republic of Plato*, Book III, Everyman's Library, 1948.

[3] Ibid. Introduction by A. D. Lindsay, p. xvii.

[4] R. H. Tawney: *Religion and the Rise of Capitalism*, 1922. Pelican, 1948, pp. 35–39.

[5] *Liberal Education in a Technical Age*, p. 152.

[6] R. H. Tawney: op. cit. pp. 179–211.

[7] *Liberal Education in a Technical Age*, p. 17.

[8] G. J. Goschen: 'Since 1880'. *The Nineteenth Century*, XCVIII, April 1885, pp. 723–32.

[9] *Liberal Education in a Technical Age*, p. 15.

The forces encouraging a technologically-based society may be traced from the beginning of the nineteenth century. Emulation of advanced continental methods of education was felt necessary after the 1830s, and the international exhibitions of the mid-nineteenth century heightened the awareness of competition.[1] Better technical education was therefore demanded because of this international rivalry. The drive to increase efficiency in production had begun, and it is still continuing. The shortage of scientists and technologists caused acute alarm at the end of the Second World War.[2] 1956 saw an accelerated demand for them, with the publication of a White Paper on Technical Education. This was the reflection of a society changing its shape to include more scientists, technologists and technicians, a matter determined by considerations of overall productive efficiency. Metropolitan Vickers, a large engineering firm, employed 10,000 in 1930, and about 2,000 of these required some form of organized education.[3] By 1956, however, there were 25,000 employees, of whom 16,000 required such organized education.

Many theories were put forward to illustrate the demand for specialists, and its effect on society. Thus, describing the 'new class' of the 'affluent society', John Galbraith showed the effect of education in the technologically advanced United States of America.[4] The 'new class' differed from others in that it rated monetary reward below prestige, good conditions, and opportunity for interesting work; its members tended to contribute their best regardless of financial compensation. Exemption from manual work and escape from boredom were some of the advantages of occupations based upon highly specialized knowledge and worthwhile objectives. To enter this new class, it was virtually vital to have received a lengthy education. It was opined that the new class, considered as a group that lived upon earned income, was made up of merely a few thousand persons in the United States in the 1850s. It consisted only of 'a handful of educators and clerics with, in addition, a trifling number of writers, journalists and artists'. The numbers grew into the millions and a similar development occurred in England. Galbraith stated that, in keeping with all past class behaviour, the new class sought energetically to perpetuate itself. The offspring were not encouraged to plan their lives to make money so much as to secure satisfaction from a job. The qualification for entry to this class was overwhelmingly that of education.[5] It was concluded that the further and rapid expansion of this class should be a major goal of society, since this sort of existence alone gave the opportunity for living fully.

The growth of the examination structure in England fits closely with this theory. The limited numbers of highly educated persons in the early nineteenth century were to swell into hundreds of thousands with university degrees or advanced qualifications in the twentieth. The number of candidates and the variety of examinations were indices of the demand for education, and for qualification for specialist advancement. The cumulative effect of examinations has already been noted in this work: it corresponds to the self-generative tendencies of Galbraith's new class.

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[1] See Chapters 4 and 8.

[2] *Higher Technological Education*. Report of a Special Committee (Chairman: the Rt. Hon. Lord Eustace Percy) appointed in April 1944; 19 July 1945.

[3] *The Times Educational Supplement*, 17 February 1956, p. 203; 'Technological Change'.

[4] J. K. Galbraith: *The Affluent Society*, 1958. Pelican, 1962, pp. 273–77.

[5] Ibid. p. 277.

An earlier theory to account for a new form of society had appeared in 1941. It was held that, just as capitalism had ousted feudalism, so a managerial society was ousting capitalism.[1] Communist Russia and Nazi Germany were held up as examples of managerial societies, where democratic power based upon the masses was ineffective, and where capitalist control was overruled.[2] Totalitarianism was not, however, the essential ingredient of a managerial society. The technocracy theory, which had had some vogue in the United States of America, was cited as a transatlantic manifestation of a similar phenomenon.[3] All such theories were based upon an assumption that effective control of the means of production gave a certain class of persons power and preferential treatment.[4] Power was granted, not so much to individuals, as to a class of individuals, specialists in a technological or in an executive capacity.

In 1958, Michael Young described the rise of the 'meritocracy', that class of persons generated when education was given in proportion to intelligence linked with effort. An aristocracy of talent was envisaged, with all the advantages in material efficiency that such a system could bring.[5] The gradual growth of such a society was sketched from the introduction of Civil Service examinations onwards.[6] The stimulus for change was applied by international competition, against all the accumulated reaction of capitalism and family interest.[7] High differentials were given to encourage merit, and the nation of the future was to surge ahead in every cultural direction because of such stimuli. The dangers were described amusingly, for riots and protest meetings were anticipated among the rejects of society, those faultily selected, the women who were not quite so easy to fit in with the ideal, or intelligent people reacting against the system.[8] A nightmare country was portrayed, spun upon an assumption that intelligence was chiefly hereditary, and ignoring the infinite adaptability of even a moderately able person. The nightmare was a little too realistic to be amusing. The gulf between the working classes and the middle classes has been described elsewhere, with the spirit of service and responsibility said to be typical of the latter class lacking in the former.[9] The social barrier between 'them' and 'us' operated to the detriment of the country's economy.[10] It showed signs of continuing, even when the old type of 'middle class' was replaced by a dominant class selected by merit.

The rise in importance of the graduates in the twentieth century has been compared with the rise of the gentry in the sixteenth.[1] It was pointed out that 115,000 Oxford and Cambridge graduates (one-fifth of the total) contributed one-half of the entries of *Who's Who*, excluding bearers of hereditary titles, and professional soldiers and sailors.[2] Graduates of other universities, no doubt, helped to fill many of the other spaces in that reference book. The proportion of highly qualified graduates was likely to increase so long as the drive for specialist efficiency continued to require the selection and the intensive education of the ablest.

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[1] J. Burnham: *The Managerial Revolution*, 1941, pp. 68–72.

[2] Ibid. pp. 145–63.

[3] Ibid. p. 192.

[4] Ibid. p. 69.

[5] M. Young: *The Rise of the Meritocracy*, 1958, p. 38.

[6] Ibid. pp. 17 ff.

[7] Ibid. pp. 62 ff.

[8] Ibid. pp. 131 ff.

[9] M. Hutchinson and C. Young: *Educating the Intelligent*. Pelican, 1962, pp. 175–77.

[10] M. Shanks: *The Stagnant Society*. Pelican, 1961, pp. 46–69.

4. SOME DISADVANTAGES

The advantages of having a society based upon promotion for the able were obvious enough. The disadvantages began to appear very quickly, and before the most extreme consequences of a policy of selection became apparent. Children were selected for the top streams of primary schools, selected again for grammar school places, selected for Ordinary level courses, selected for university places; and the process continued as they were selected for employment, and selected for promotion. Each stage of selection gave its residue of failures, of hopeful candidates who had not managed to make the grade. Larger and larger numbers were chosen, but the masses were still left to pursue other courses. The incentives offered to pupils to qualify became more obvious to the multitudes, as was to be expected in such a society. The provision of school and college places to cater for the demand lagged behind, however, and competition for entry was a consequence. About three-quarters of the parents in South-West Hertfordshire wished their children to attend a selective school of some sort in the 1950s, though there was provision for about 24 per cent.[3] Even those examinations, such as the G.C.E., which were intended to be qualifying ones could be criticized because they showed signs of being competitive in operation. Over 40 per cent of children failed the Ordinary level examinations.[4] The actual pass marks of the individual examination papers, at about 40 per cent, were rather striking, and were subject to criticism. 'Surely', it could be argued, 'a truly qualifying examination, designed to test knowledge, should have a high pass mark?' Either the examination papers were too difficult for their task, or their legacy of competition was with them still. It would seem likely, however, that the high proportion of failures was occasioned by certain schools entering relatively large numbers of children with little chance of success.

With selection came rejection. With rejection came behaviour problems, and a feeling of hopelessness in the pupils.[5] Modern schools suffered greatly from this in their early days, for the pupils realized, more or less consciously, that the way to the professions and many of the more rewarding jobs was virtually barred once the examination at eleven plus had been 'failed'. Examinations were introduced into the modern schools partly because of this, for although relatively few actually sat for them, the prospect of opportunity was opened to much larger numbers of young children.[1] This device could only be partially successful, because it merely pushed the problem further down the ability scale, leaving the weaker streams in the same unsatisfactory position as before. The 'second twenty per cent' of the able children were to be creamed off for the full Certificate of Secondary Education, in the 1960s. The sixty per cent were to be made aware that they had failed to make the grade, first at the age of eleven and then with failure to gain admittance to a G.C.E. or full C.S.E. course.

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[1] A. H. Halsey: 'A Pyramid of Prestige'. *Universities Quarterly*, xv, 1960–61, pp. 341–45.

[2] Ibid. p. 344.

[3] J. E. Floud, A. H. Halsey and F. M. Martin: *Social Class and Educational Opportunity*, 1956, pp. 15 and 76.

[4] M. Hutchinson and C. Young: *Educating the Intelligent*, 1962, pp. 150–55.

[5] *The Times Educational Supplement*, 14 September 1962, p. 281; Joseph Hill, letter.

With each such extra selection, an earlier ideal, that of using school records effectively for all pupils, was pushed further into the background. A full use of internal school tests and assessments would have provided a method of selection that was no less delicate than external examinations, and which would have had the advantage of greater homogeneity. The Ministry of Education was made to back the C.S.E., for example, because the alternative was to suffer examinations incorporating such undesirable features as entry at fifteen years of age. The Ministry was forced by pressure from the schools, the parents and the children, to help in organizing further selection for the few. Such was the nature of the competitive system.[2] Sixty per cent of the children were to be left with a feeling of treble failure, but this was the price that was to be paid for selecting the able.

The fact of selection was clearly visible in the primary and even in the infants' schools. The A stream pupils were in good spirits, were backed by their parents (who showed greater interest), and developed positive attitudes to work.[3] The B and C streamers were all that the A streamers were not. Again, even in grammar schools, allegedly bastions of the intellectually select, those placed in the slow forms were said to show similar symptoms.[4] Wrong attitudes to study may have resulted in low placing but, on the other hand, low placing may have created the wrong attitudes. Opinions varied as to which was the cause and which was the effect. The importance of the issue was recognized by the Minister of Education in 1962, when he commissioned the National Foundation for Educational Research to inquire into the effects of streaming children in the junior schools.[5]

Growing numbers of teachers were questioning previously held convictions about the value of streaming. Even some grammar and direct grant schools which, being selective themselves, were less adversely affected than other secondary schools, were beginning to experiment with systems not involving streaming. The maintenance of good examinations results was one of the recognized tests of a school's continued efficiency, and the Headmistress of Bolton School (Girls' Division) could demonstrate that there was little to choose between streamed and unstreamed results.[6] Although forms graded by ability were abolished in this experiment, together with much of the other claptrap of selection such as 'form orders' and frequent examination, setting by ability was retained for mathematics, French and science after the first year. 'Setting' of this sort, in certain subjects, received strong support from the Central Advisory Council for Education in 1959.[1] It was said to work well for weak as well as for strong mathematicians.

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[1] See Chapter 7.

[2] See Chapter 7.

[3] *The Times*, 13 May 1963, p. 15; 'Sheep and Goats'.

[4] B. Simon: *The Common Secondary School*, 1955, p. 101.

[5] *Education in 1962* (Cmd. 1990), p. 20.

[6] *The Times Educational Supplement*, 10 May 1963, p. 994; Margaret Higginson: 'Grammar School Streaming, The Case Against'.

The convenience of streaming had been noted for many years, and the advantages had become axiomatic to many teachers. Andrew Bell's 'Madras' scheme of education was based upon subdivision and classification at the beginning of the nineteenth century.[2] No class was to be retarded in its progress by idle or dull boys, and every boy in every class was to be fully and properly employed. The 1931 Report of the Consultative Committee on the Primary Schools advised the classification of children by ability into A, B and C streams, where the schools were sufficiently large.[3] Psychologists, and others, advised this course so that the teachers' task might be lightened. Such a practice, carried out over the years, was useful in furthering the education of the able. The C streamers, doubtless, saw the obverse of the coin.

Eric James, the High Master of Manchester Grammar School, and a strong supporter of selection, once described the comprehensive school children as ungraded, untested and unperturbed.[4] He knew that comprehensive schools were advocated by those who felt that selection at the age of eleven was wrong. But even here, in the comprehensive schools, selection into streams was the usual practice.[5] Selection had emerged within the schools, perhaps to the disgust of those who had advocated a common and undifferentiated basic schooling.

The extra care lavished upon the more able children in schools could be judged by financial means. It was estimated in 1958 that because of better existing buildings, and because of favourable staff ratios for older children which were actually spread over the whole age-range, the average grammar school child received 170 per cent more per year, in terms of resources, than the average modern school child.[6] The longer period of education was, of course, an additional advantage to the grammar school pupil. The Hertfordshire Education Committee reported that the average general allowances for children at modern and grammar schools were £3:1s. and £4:4s. respectively in 1955.[7] If the allowances were compared for children of the same age in similar schools, the figures were still £1:15:4 and £2:18:4 respectively. Even so, there had been a slight improvement. Grammar school children had cost, on an average, more than twice as much as senior elementary school children in

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[1] *Report of the Central Advisory Council for Education (England)*, 1959, pp. 219–20.

[2] A. Bell: *An Analysis of the Experiment in Education made at Egmore near Madras*, 1807, 3rd edn., pp. 4–5.

[3] Board of Education, *Report of the Consultative Committee on the Primary School*, 1931, pp. 4–5.

[4] *The Schoolmaster*, 30 April 1954, p. 682.

[5] R. Pedley: *Comprehensive Schools Today*, 1955, p. 2.

[6] J. Vaizey: *The Costs of Education*, 1958, pp. 101–2.

[7] Hertfordshire County Council Education Committee. *The Secondary Modern School*, 1955, p. 5.

1939.[1] Hertfordshire arranged subsequently for there to be financial parity, as well as the theoretical parity of esteem, by raising the modern school allowance. Attempts were therefore being made to expend comparable amounts on all children. Certain children were already in a relatively privileged position because of their home background. Comparatively few manual workers' children entered the grammar schools, and an even smaller proportion passed into the universities.[2] The children of 'managerial and professional' parents, second generation grammar school pupils at least, were much more likely to do better academically. One of the contributory causes here was probably the greater attention given to their childrens' education by the abler parents.

The secondary modern schools used external examinations in a limited way to improve morale, to give pupils an aim, to give them opportunity and, it is to be suspected, to do the same for their teachers.[3] A modern school with an extended course could frequently do far better than the average school without, from the point of view of discipline and morale. A sort of 'peck order' then emerged in a locality, with the direct grant school at the top and so through a range of secondary schools to some poorly ordered modern school at the other end of the list. A similar situation had developed naturally in colleges and universities. Oxford and Cambridge attracted the best educated, in general, and progessively the modern universities, the training and technical colleges and finally the colleges of further education received the less able students, being less fashionable. The considerable concern over examination results of those institutions higher in the peck order was natural enough when the maintenance of high standards was the criterion of excellence. The main disadvantage was that the least flourishing institutions continued to attract the less able students and the less well-qualified staff.[4]

The idea of competition extended deeply into the schools. Grammar schools were so closely linked with both internal and external examinations that the time available for actual teaching was severely limited. Dorothy Daldy, speaking about her researches to the British Association in 1960, stated that frequent internal examinations were a deterrent to true learning, and that excessive importance was attached to them.[5] The period after the examinations was often wasted, so that the total time available for actual education was considerably reduced.

Academic subjects were not the only sphere of competition for, as it is commonly known, considerable emphasis has long been laid on competitive games in British schools. Competition in games and sports is natural in a society of young men. An odd survival at Mill Hill School, a public boarding school for boys, illustrates the way in which the pupils themselves tended to conserve competitive ways. The highly organized system of prefects and officials was for many years responsible for the social life of the school, much of which revolved about sports of every description. Competition to play for representative teams was intense, and at the end of each season lists were drawn up by the selection committees of all players in order of merit.[1] The 'make-ups', as these lists were known, were published regularly, even though form orders of academic ability had long since passed out of fashion. Proficiency in sport was still rewarded with honour at Mill Hill, with coloured ties and caps, and blazers of many grades, as it had been for decades. Competition perpetuated itself in the uncritical society of a school, just as it could easily do in society at large.

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[1] Hertfordshire County Council Education Committee. *The Secondary Modern School*, 1955, p. 2.

[2] J. E. Floud, A. H. Halsey and F. M. Martin: op. cit. pp. 87–100 and 123–27.

[3] See Chapter 7.

[4] N. Annan: 'Peck Orders Among Universities', *Universities Quarterly*, xv, 1960–61, pp. 351–60.

[5] *The Times Educational Supplement*, 9 September 1960, p. 288.

Awareness of the dangers of examinations and competition generally was already apparent in the nineteenth century. Several hundred professors, teachers, and others, signed a protest in 1888, claiming that education was being sacrificed to examination.[2] It was claimed that dangerous mental pressure and misdirection of energies and aims were to be found in nearly all parts of the educational system. Little children were being treated merely as instruments for earning Government grants; young boys of the middle classes were trained for scholarships just as horses were trained for races, with little thought for their future; undergraduates were being led to believe that the winning of money prizes and high honours was the main aim of education. It was stated that the examinations destroyed good teaching, and that the existence of prizes confused the public as to the proper aims. Opponents could reply that it was the 'unendowed coach' who was the chief reason for this attack on examinations, with his boisterous but exasperating parade of successes.[3] The examination system, although open to modification, was already well-established. The Bishop of Carlisle could recall an anecdote of a German visitor who, observing that competition in examination and in sport was a common feature of the English scene, claimed that the English did everything by way of racing.[4] Perhaps conditions for the rise of a meritocracy were exceptionally favourable in this country from the first.

The new type of society that was emerging because of the demands of technology in a democratic State was not without critics on cultural grounds. T. S. Eliot stated that no culture has appeared or developed except together with a religion, and no nationwide religious fervour accompanied the growth of a modern society based upon examination and education.[5] Intellectual ability was not, Eliot asserted, the sole matter upon which culture depended.[6] The primary channel of transmission of culture was the family, though other influences existed.[7] Education was, he felt, the means of helping to preserve the class and of selecting the élite.[8] Eliot hated mass culture, and felt that education was not a thing to be diffused as widely as possible; the dangers of selecting an élite by intelligence rather than by education were apparent to him.[9] The lack of a general cultural tradition in society was a sad fact, and it was not especially helped by the modern extension of educational opportunity to all classes of society.

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[1] *The Mill Hill Magazine*, December 1961, pp. 46–47.

[2] *The Nineteenth Century*, November 1888, pp. 617–23.

[3] *The Nineteenth Century*, February 1889, p. 237; W. Baptiste Scoones.

[4] *The Nineteenth Century*, February 1889, p. 315; The Bishop of Carlisle.

[5] T. S. Eliot: *Notes Towards the Definition of Culture*, 1948, 5th Impression, p. 15.

[6] Ibid. p. 23. [7] Ibid. p. 43. [8] Ibid. p. 100.

[9] *The Times Educational Supplement*, 14 February 1958, p. 245; 'Sir Eric James on T. S. Eliot'.

It is possible to take a less abstract view of the new form of society than T. S. Eliot's, and yet see its shortcomings. The owner of a wireless shop in Hampstead wrote to *The Times* in 1958 to comment on the fact that all of his sons had passed through universities to do responsible work elsewhere.[1] This was admirable from the State's point of view, in that it received the benefit of the efforts and initiative of the cleverest young men. The effect on the public, however, was less desirable. 'Who', it was asked, 'would be left to mend the television sets, carry on the family businesses, and ensure that the matter of providing a worthwhile service to the individual was carried out with zeal and efficiency?' If all those with the best brains and the greatest drive were sucked into certain key professions, the general life of the nation would be the poorer.

5. OTHER METHODS OF EXAMINATION

The numbers using the great external examinations grew rapidly after the Second World War and it even became necessary to use machines to help classify students.[2] Examining boards began to use electronics to help them in their work. There was even some talk of marking mechanically, and fresh types of assessment were discussed.[3]

Formal written examinations were not the only means used for selection. Interviews were usually necessary before a child passed from a primary to a secondary school, or from secondary school to college. These were continued despite the objections of statisticians and psychologists who claimed that nearly all evidence of the validity of interview-judgments as predictors of academic performance was uniformly discouraging.[4] The predictive validity of headmasters' reports was as low as .2, though it seemed likely that it might be possible to increase it to about .5 by approaching the task scientifically.[5] Such methods tended to lack objectivity, and the advocates of purely objective testing could put their case forcefully, backing it well with statistics. It was sometimes suggested that objective tests should be carried out at a level above that of the eleven plus, where they were already in common use. Such practice was normal in America.[6] The essay-type questions of the G.C.E. were open to criticism.[7] Many headmasters and senior tutors appeared to remain unimpressed by such arguments as these, suspecting, perhaps, that one may prove anything with statistics, and they continued to interview students and rely upon headmasters' reports, as well as upon the traditional secondary school examinations.

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[1] *The Times*, 26 November 1958, p. 11; I. Drazin, letter.

[2] E. B. Butler: 'Sorting Students Mechanically'. *Universities Quarterly*, XIV, 1959–60, p. 72.

[3] *Examinations Bulletin* No. 2. 'The Certificate of Secondary Education: Experimental Examinations – Mathematics', 1964, p. 3.

[4] W. D. Furneaux: *The Chosen Few*, 1961, Chapter VII.

[5] Ibid. pp. 88 ff.

[6] E. L. Black: 'The Marking of G.C.E. Scripts'. *The British Journal of Educational Studies*, XI, No. 1, November 1962, p. 70.

[7] P. E. Vernon: *The Measurement of Abilities*, 1955, pp. 211 ff.

Those involved in selection were aware that tests and examinations gave only limited descriptions of candidates. Across the Atlantic there was talk of assessing personality more comprehensively, of setting tests of morality or of creativity. This last characteristic was being assessed, amongst other ways, by 'open-ended' tests, where as many responses as possible were required for a given question.[1] Normal intelligence tests usually demanded one specific answer, predetermined by the questioner. People who scored well in ordinary intelligence tests were not always those who did best in tested creativity.

The Civil Service adopted methods of competitive examination in the nineteenth century that were to rely solely on written examinations, often at university honours level.[2] Personal qualities of character and temperament were not to be assessed. Such personal qualities were the subject of assessment only after the First World War, when those who qualified in a written test were obliged to appear before an Interviewing Board. Marks were awarded by this Board, and added to the marks for the written examination, to yield a final order of entrants.[3] Maximum marks of 300 and 1,000 could be obtained from the interview and from the written papers respectively. The whole business of selection was rather cumbersome. The examination was unsatisfactory because it involved a protracted wait for the candidates before the result was announced, in which time they might be lured to jobs elsewhere. The interview was unsatisfactory because insufficient weight was given to it. Opportunity to change the system came at the end of the Second World War, when large numbers of young men were leaving the Armed Services to enter civilian occupations.[4]

The new procedure for candidates for Civil Service entry was for them to take a simple non-competitive examination to check their general ability. This was to be followed by what came to be known as a 'house party' where, for forty-eight hours, potential entrants were interviewed together, observed, and tested continuously in a variety of situations.[5] After 1950, when normal procedures began to operate once more, it was possible to try for admission either by competitive examination, similar to that prewar, or by the house party method. Residence no longer came to be necessary in the latter case, but assessors utilized reports from headmasters and others together with the results of psychological and intelligence tests and of 'projection' tests to gauge attitudes, ambitions, character, and the like. The results of practical tests, in taking the chair at committees, for example, were taken into account. Candidates for the Senior Branch of the Foreign Office were obliged to enter by this method, and not by competitive examination, for written examination was not felt to be an adequate way of selecting men of character and ability, some of whom might be poor examinees. Other departments allowed their entrants a choice.

[1] P. E. Vernon: 'Creativity and Intelligence', *Educational Research*, June 1964.

[2] See Chapter 2.

[3] G. A. Campbell: *The Civil Service in Britain*. Pelican, 1954, p. 81.

[4] Ibid. p. 83.

[5] Ibid. pp. 84–87.

Such methods as those of the house party were necessarily expensive, and could only be afforded in cases where selection was of great importance. Written examinations flourished, in contrast, where numbers were large, and individual attention impracticable. Examinations could be accused of being impersonal because of their very size. This was, presumably, the result of a division of labour. The modern functionalism had tended to separate teaching and examining from the pursuit of an occupation. Standards were maintained in the Middle Ages because apprentices worked side by side with their masters, learning by induction and working for a masterpiece. Assistance from the master may have been a variable quantity, but at least this system maintained reasonably close contacts.

Psychological testing was beginning to play a part in assessing abilities and attitudes, though probably not so great a part as in America, where it was used commonly, well before the Second World War.[1] Objective tests of attainment and intelligence in England have already been mentioned in connection with the eleven plus examinations.[2] Entry to the Civil and Armed Services after the War frequently involved assessment of personal qualities by various means, though Britain continued to lag behind America in this respect.[3] Americans took William Whyte seriously when he jokingly suggested that there should be a centralized agency for testing and recording personal data for the large business organizations, to include psychological measurements of every description for each employee.[4]

The concept of registering such personal information was not foreign to these shores. When Professor Boris Ford, the Director of the University of Sheffield Institute of Education, criticized the proposals of the Beloe Committee, claiming that the resulting examinations would be pale imitations of the G.C.E., he suggested that a constant process of consultation between school staff at every stage should be substituted.[5] This was to enable the teachers to form an intimate understanding of each child, which would be useful in assessing his potentialities and prospects. A continuous and comprehensive assessment of all children was envisaged, including even the educationally subnormal who would never sit for a formal examination. The implications of this were that grading should become continuous and applicable to all. This was the objective of the supporters of the Norwood Report, and thus for some years of the Ministry of Education. The idea may have anticipated little more than a glorified record system, but this was rather frightening when it took on the work of a formal examination, and when there was virtually no way of a person escaping the system. At its least formal, the custom of using record cards in English schools caused little comment on grounds of personal liberty. The files were merely a convenient way of recording essential facts about large numbers of individuals.

Other methods of examination and assessment were becoming available, but it was remarkable that changes were not more rapid. The young man sitting for an examination in the 1960s would be submitting himself to a procedure little different from that which his father or even his grandfather experienced. Most of the papers lasted for two or three hours and required quite lengthy written answers. The scale of the operation was obviously much vaster, and the subject matter may have changed a little, but the examination was recognizably similar to its late nineteenth century predecessors. It was remarkable that the scientific approach to examining had not yielded more spectacular results at the level of secondary and higher education. Whole industries and administrative organizations were being transformed out of all recognition by the scientific approach, and it was natural to expect change. Even the examination of eleven-year-olds had provided a happy hunting ground for statisticians and psychologists with fresh methods of testing, but traditional methods appeared to predominate elsewhere.

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[1] L. Kandell: 'Examinations and their Substitutes in the United States', 1936. *Carnegie Foundation for the Advancement of Teaching*. Bulletin 28.

[2] See Chapter 5.

[3] W. H. Whyte: *The Organization Man*, 1957, pp. 171 ff.

[4] Ibid.

[5] *The Times Educational Supplement*, 9 March 1962, p. 461; 'Alternatives to Beloe'.

The first systematic comparison of any importance of the marks of examiners was made in the 1930s, and it then became obvious that chance played a large part in the results.[1] Thus, when 15 average School Certificate history scripts were marked by 14 experienced examiners, over 40 different marks were awarded.[2] When the scripts were re-marked by the same men after 12 to 19 months, the examiners had changed their minds about pass, fail or credit classification in 92 cases out of 210. It was stated in the report on the survey that boards of examiners were better than individuals in these matters, but were still far from perfect.

The outward form of the examinations altered surprisingly little in the face of such criticism as this. Essay-type answers were still expected, and standardized objective tests were rarely met after the age of eleven. Excessive care was, however, taken by examiners to counter much of the criticism. Whereas the early experiments had required examiners to assess papers without giving them the opportunity of discussing their methods together, now the necessarily large teams of examiners met frequently to compare notes. Statistical checks were made to ensure comparable markings, samples were taken of examiners' marks, and more scientific ingenuity and experience went into the marking than may have been indicated by the papers at face value. It could be claimed by the representative of a G.C.E. board that the experiments earlier in the century were of minimal relevance to modern procedures.[3] Nevertheless, there was always scope for improvement, for increasing the reliability and validity of examinations in a scientific age when it could be widely assumed that there must always be a better way of doing any given job.

Relatively little research work was published about examinations at the secondary school level and above in the 1950s and 1960s, considering its importance. What there was showed, for example, that there was only a correlation of .4 between G.C.E. A level results and the class of degree.[4] The limited value of achievement examinations in forecasting and predicting could be compared unfavourably with American practice.[1] Several studies were made to compare school with university performance.[2] However, the eleven plus examinations were said to operate with much greater thoroughness. Those consisting of standardized tests and scaled teachers' assessments were described as the most efficient form of examination in the world in terms of reliability, validity and predictive effectiveness.[3] All other examinations were described as elastic in comparison. The G.C.E. boards appeared to ignore the implications of the immense quantity of research carried out after 1946 into the eleven plus examinations.[4] Stephen Wiseman showed that the doubt cast upon the validity of the essay-type examinations was exaggerated, but by 1962 none of the examining boards had attempted to adopt the improved scheme of marking that he had suggested, or to test the consistency of their own examinations.[5] Most of the published work on the subject was provided by the Northern Universities Joint Matriculation Board: in public, at least, most other boards avoided anything that might be mistaken for self-criticism.[6] However, London University announced in 1964 that it was to set up a research unit to study the field of examinations in schools. The computer used to speed the transmission of examination results could also be used incidentally to check the performances of individual examiners or of schools. Not only could examinations be analysed on the grand scale (there were 300,000 candidates from 100 countries in 1964), but it was also hoped to approach some of the fundamental problems behind the examining techniques.[7] This was quite a new development in England, though the Americans had for many years devoted much thought to such matters. The Oxford and Cambridge Joint Board had even felt constrained to hinder outsiders publishing surveys of its results, though this move may have been aimed at those making sensational rather than scholarly surveys.[8]

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[1] Sir P. Hartog and E. C. Rhodes: 'An Examination of Examinations', 1935, p. 9. International Institute Examinations Enquiry.

[2] Ibid. p. 10.

[3] J. A. Petch: *The Matriculation Board, What it is and what it does*. 1963, p. 21.

[4] R. A. C. Oliver: 'The Selection of University Students'. *Universities Quarterly*, XVI, No. 3, June 1962, p. 264.

A rumour was heard of fresh methods when the Robbins Committee reported on higher education in 1963.[9] It was urged that a better use be made of school records, to ameliorate the worst effects of the high demand for university places. Scholastic aptitude tests similar to those used in the United States provided another chance to experiment. Work had already begun in Scotland on these lines, in an attempt to avoid cramming specifically for examinations.

This is not the place to attempt to summarize all the experiments carried out in recent years, but mention should nevertheless be made of one organized by the

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[1] R. A. C. Oliver: op. cit. p. 269.

[2] K. Austwick: 'G.C.E. to B.A.'. *Universities Quarterly*, xv, 1960–61, pp. 64–71.

[3] W. D. Wall: 'Educational Research and the Needs of Schools'. Address to the 1959 Conference of the National Association of Inspectors of Schools and Educational Organizers, p. 8.

[4] E. L. Black: op. cit. p. 61.

[5] Ibid. pp. 61–63.

[6] See J. A. Petch: *Before Admission*, 1959; *Marks and Marking*, 1960; R. A. C. Oliver: *The Effectiveness of Advanced Level as a Criterion for Selection*, 1960.

[7] *The Sunday Times*, 16 August 1964, p. 6.

[8] *The Times Educational Supplement*, 21 August 1964, p. 252.

[9] Report of the Committee on Higher Education (Cmnd. 2154), 1963, pp. 83–84.

Curriculum Study Group in 1962, in connection with mathematics examining for the C.S.E.[1] 'Multifacet' tests were devised, consisting of a variety of problems, each with a number of possible answers written out, some of them being true. The candidate had to mark each answer true or false. One of the main reasons for introducing objective methods of this kind was stated to be that examining was expanding and was likely to expand even more rapidly in the future.[2] Questions of the type described above could be marked quite safely by inexpert examiners, and could be used to calibrate teachers' assessments, even if they were not acceptable for direct examining.

Questions of this type were not likely to be acceptable to teachers except as one part of an examination. The statement of a mathematical argument was still widely held to be most useful, and particularly so to the incoherent young! It was necessary to view cautiously any development of examining designed primarily for the convenience of examiners, and if cheapness was the main advantage of such a method then it deserved to be questioned still more seriously. Large numbers of young people entering the new C.S.E. examinations would presumably be taught by proportionately large numbers of teachers, giving a proportionately large number of potential examiners. More relevant were the possibilities of such a test in covering a greater part of the syllabus than a conventional examination, or in allowing insight and imagination freer play. *Examinations Bulletin* No. 2 was the account of an experiment, as its authors were at pains to point out, and it was to be expected that teachers would welcome it as a new idea in this country, but should only use it if they thought fit.

If secondary school examining bodies were slow to introduce new types of tests, this was probably because the psychological approach had been associated for so many years with the mere measurement of intelligence and aptitude, considered as qualities that were inborn rather than acquired. In 1944, the traditional methods of examining were defended by drawing a distinction between the use of examinations in testing results and in providing a mobilizing force or an incentive to effort on the part of both pupils and teachers.[3] It was claimed that only properly organized examinations could carry out this last function, whereas intelligence or aptitude tests had little concern with any course of preparation. The part played by examinations in directing courses of study was underlined.[4] Progress was made in the next twenty years in understanding the nature of objective testing. The multifacet test described above was an attempt to mark objectively questions set on a syllabus designed to fit the school curriculum. Unlike the majority of previous objective tests, it was intended to help in defining a course of study, as well as to classify students. It was surprising that there had not been more attempts of a similar nature.

When fresh methods of examining are introduced, the aim is to achieve greater objectivity, reliability or validity. An attempt is made to achieve greater efficiency. The fact that borderliners always form a large percentage of the whole, that those not selected at eleven plus sometimes do well at Ordinary level, that doubtful G.C.E. candidates go on to win university 'firsts', should not detract from the worthiness of the aim. Those who value human beings as persons, as opposed to statistical phenomena, may well regard the apparent human resistance to direct scientific classification with something approaching glee. How awful it would be if the future lay hopelessly revealed by an examination result! Ambition suddenly realized would be frustrated, and the values of courage, determination or perseverance would be set aside as inadmissible. One cannot best measure honesty, or even effort, by examination, and no attempt should be made to do so. Examinations play but a small part in judging a man's real worth, but they should nevertheless be arranged as carefully as science permits.

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[1] *Examinations Bulletin* No. 2. 'The Certificate of Secondary Education; Experimental Examinations-Mathematics', 1964.

[2] Ibid. p. 3.

[3] J. L. Brereton: *The Case for Examinations*, 1944, pp. 1–4.

[4] Ibid. pp. 61–64.

6. WHO CONTROLS THE SYSTEM?

The systems of examinations grew from very small beginnings and it was difficult for those who initiated the schemes to lay down methods of controlling the examinations which would be suitable for the vastly changed conditions and inflated numbers that were to appear later. Actual control shifted over the years so that, whereas it was originally held by one authority, another body tended to take over in the course of time. Power was sometimes seen to be held at two levels, one the theoretical, and one the effective. Thus, the local bishop held theoretical control of the medieval university by issuing the licence to teach, yet the masters possessed the real power by arranging examinations and admitting new members.[1] The university bodies held theoretical control of the G.C.E., yet effective control was largely in the hands of certain practising teachers who examined in their spare time or who had a part to play in arranging the syllabuses.[2] A similar part came to be played by teachers in connection with other examining bodies, with the Royal Society of Arts, and locally organized secondary school examinations in the 1950s for example.

Much of the control in the nineteenth century was retained in the hands of Oxford and Cambridge graduates, who influenced elementary and secondary education of every type. As the machinery of mass education began to churn out larger numbers of better-qualified persons, so the cumulative effect led to still more examinations and more candidates. Teachers as well as administrators began to have a say in selecting pupils for the grammar schools between the Wars whereas, under the Revised Code, in the 1860s, the pupils were examined by Her Majesty's Inspectors.[3] The teachers in technical institutes played a large part in examining their students, in one way or another, over a similar period, though external examinations had been the rule earlier. Whether because of the sheer size of the numbers to be examined, or whether for other reasons, teachers as a class were beginning to play a much greater part in examining the pupils that they taught, and therefore in controlling the curriculum in their schools. This contributed to their status in society as professional men and women, a matter emphasized in the Norwood Report, which advocated that they should virtually arrange their own school examinations.[1] This Report was, perhaps, ahead of its time for, although teachers almost monopolised the subject panels of examining boards, little fundamental change of administrative principle was visible before the arrival of the C.S.E. examining bodies, which were to be heavily representative of teachers at every level.[2]

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[1] See Chapter 1.

[2] See Chapters 3, 6 and 7.

[3] See Chapter 5.

The trades and professions themselves had originally controlled the qualifications of entrants with varying formality and efficiency. The universities and certain other educational bodies took over this function to a considerable degree in the second half of the nineteenth century, through the university local examinations boards, the College of Preceptors, and the Education Department, for example. The process was completed with the formation of the Secondary School Examinations Council. Control over the secondary school curriculum was thus placed in the hands of bodies interested in education generally, rather than in education for a particular occupation. The process was taken a stage further as power was placed in the hands of the teachers themselves. This process was not particularly far advanced, even by 1962, according to critics of the secondary school examinations who felt that university interests had too great a share of the power.[3]

The universities had, for over a century, possessed a near monopoly of academic respectability in the public eye. They alone were self-examining bodies naming, through their governing councils and committees, the examiners of their students. Their self-elective features had been retained continuously from the Middle Ages in some cases. They were at one time considered to be examining bodies only, when the Oxford and Cambridge colleges were more powerful, and when London University was in its infancy. The universities' propensity for extending their examining facilities to cater for training colleges and secondary schools should not therefore excite surprise. Internal examiners at London University in the 1960s were named by the widely representative Senate, which was advised by its Academic Council and tributary Boards of Studies.[4] Examiners and assessors in the University of Cambridge were nominated and appointed by the General Board of Faculties, a representative body of the University.[5]

The universities, being the repositories of intellectual integrity, were entrusted with the examination of other institutions, notably of secondary schools and teachers' training colleges. The policy was attractive at first because the universities were very free from Government interference yet were well enough known to award qualifications of national significance. The universities, too, could be considered above reproach in examining schools and they had an interest in some of the school leavers. It is to be suspected that university prestige was somewhat heightened by its external functions. But when the universities, through their examining boards, could be observed in a commanding position in secondary and teacher education in the 1960s, it could only be for historical reasons. New systems that were being established at the time, for Diplomas in Technology and for the Certificate of Secondary Education, had no need to rely upon the universities for backing.

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[1] *Curriculum and Examinations in Secondary Schools*, 1943, p. 45.

[2] *The Certificate of Secondary Education. The Fifth Report of the Secondary School Examinations Council*, 1962, pp. 12–17.

[3] M. Hutchinson and C. Young: *Educating the Intelligent*. Pelican, 1962, pp. 153–54.

[4] University of London Calendar 1962–63; University of London Statutes, pp. 188 ff.

[5] Statutes of the University of Cambridge, 1961, pp. 21 and 101–2.

7. THE RIGHT MEANS OF CONTROL

Examination systems needed to satisfy two opposing conditions. First the systems had to be large enough to allow nationwide recognition of the certificate, for internal and small local examinations could be void of significance to employers and even to children. Secondly, they had to be sufficiently local to keep in touch with the individual teachers in the schools. It could be stated in 1956 that the 'mass nature' of the O level examinations was the main obstacle to educational advance in the grammar school, for the great size of the London and Northern examining bodies made these particularly impersonal.[1] Small interlinked regional examinations were called for.[2] It has been shown that there were also conditions encouraging the establishment of larger rather than smaller bodies; the capacity for providing a rich diversity of papers with financial economy was an important factor.[3] The number of bodies originally considered necessary for the C.S.E. scheme was reduced for such reasons.

With such large examining bodies as existed in the mid-twentieth century, delegation to subject committees was common practice. It should be noted that the usual practice was for delegation to be made not to the schools or groups of schools, but to specially formed committees, largely made up of practising teachers. The size of the boards tended to make direct influence by the schools difficult. But the C.S.E. examinations, with their emphasis on full teacher-representation at all levels, were arranged so that power could lie in the hands of the actual teachers involved in teaching.[4] The examination could thus constantly reflect the developing secondary school curriculum and not impose its own pattern on the schools. Delegation to local examination committees was an important arrangement which seemed likely to lead to more real teacher-control. External assessment of school examinations and of course work was likely to be particularly useful.

In the G.C.E. examinations, the subject committees by themselves tended to lack the initiative to make important changes in the syllabuses. When several hundred schools were involved, heavy resistance to change might be anticipated. The examinations controlled the curricula, and yet the persons controlling the examinations were not in a strong position to alter them and keep them up to date. Special external pressure had to be applied, or experimental groups had to be formed, to take initiative, as in the case of the School Mathematics Project.[5] The machinery of the secondary school examinations was excellent in that it could accommodate such experiments, but there was no built-in device for ensuring that syllabuses were modernized. The schools themselves made few demands for change by asking for special syllabuses. Lack of change could imply that all was well, rather than that there was a stuffy conservatism. That all was not well was suggested by the fact that changes were being demanded in such rapidly growing fields as the mathematical, and that they were not originally being met by initiative from within the examining machinery. The likely flexibility of the C.S.E. bodies in involving practising teachers more intimately, and the experience of the technical examining organizations which relied on industrial representatives as well as teachers to keep the syllabuses revised, could show the way to the more conservative university examining bodies, manned though they were by schoolteachers at the syllabus-forming level.

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[1] F. Whitehead: 'External Examinations Examined'. *The Journal of Education*, January 1956, pp. 11–14.

[2] Ibid. p. 13.

[3] See Chapter 3.

[4] *The Fifth Report of the Secondary School Examinations Council*, 1962, p. ix.

[5] See Chapter 7.

The payment of chief examiners gave little incentive to keep syllabuses modernized. Of course, basic syllabus reform generally depended not upon examiners but upon the deliberations of teachers' committees constrained by mass opinion to adopt an agreed common denominator. Nevertheless, the easiest path for an examiner was to set a paper which would not excite comment, and which would not be so very dissimilar to that of the previous year. Chief examiners in the University of London O level scheme were paid only seven pounds for each paper set, and this was to be shared among the examiners taking part.[1] The table of tariffs made no specific mention of payment for participating in the difficult job of constructing new syllabuses and of setting fresh questions. Of the several hundred pounds that might be earned in the course of a year's examining, seven pounds was a small fraction, though supplementary fees and attendance fees at meetings may have rendered this less noticeable. The consequence was that, in mathematics for example, the 1964 papers differed very little from the 1944 Certificate papers, certainly at the higher level.[2] The university courses had altered considerably in depth and content over the same period.[3] The East Anglian C.S.E. Board at first paid six guineas to a chief examiner for setting the papers on a syllabus. In mathematics it was usual to set two papers, one of which was to contain options or alternatives, so that the amount of labour was doubled or trebled. Such payment was likely to deter examiners from setting papers with the scientific care suggested in the examination bulletins prepared by the Examinations Council. The payments for actually marking the papers were relatively attractive, though less generous than for O level.

It would be wrong to suggest that examining boards stifled completely the development of new syllabuses. Experimental papers have been mentioned earlier, and occasional revised versions of existing syllabuses appeared from time to time in connection with all the examining boards. The Northern board was in the throes of changing a dozen Advanced level syllabuses in 1962, and as many again at the Ordinary level, though this activity was probably exceptional.[4] Several examining boards were actively considering 'alternative C' mathematics syllabuses by 1964. Examining boards could even describe teachers as being backward in demanding special syllabuses, and point to relevant statistics for support. There was, however, much evidence that examining bodies were excessively cautious in permitting deviations from the accepted syllabuses, and that there was less flexibility in practice than existed in theory.[1] Fresh syllabuses demanded extra work, and difficulties arose in correlating standards between papers. A concerted drive on the part of the examining bodies to better relations with the schools would have led to real improvements. Explanations of policy to subject teachers, and invitations to participate in the work of marking and of introducing new syllabuses would surely have answered some of the criticisms. There was, for example, little opportunity for direct contact between the London examining board and the schools; important changes, such as those for the structure of the 1964 A level papers in mathematics, were introduced with the very minimum of explanation.[2]

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[1] University of London. Payments to Examiners for Examinations in and after Summer 1963. (1, G.C.E. Chief Examiner.)

[2] University of London. G.C.E. Papers in Mathematics, Summer 1964, etc.

[3] University of London. B.A. Honours and B.Sc. Special Examinations, 1964. Mathematics, etc.

[4] *59th Report of the Joint Matriculation Board*, pp. 10–11.

One of the disadvantages of having separate examining boards was that there was no direct machinery for coordinating standards in any one subject. Only after 1950 were conferences held for this purpose among all secondary school examining bodies.[3] Even after this there were frequent letters to *The Times Educational Supplement* and other journals, pointing out major differences in standards between examining boards.[4] The Science Masters' Association and the Incorporated Association of Assistant Masters showed clearly how variable were the results between different boards and between different subjects.[5] The grammar school section of the National Union of Teachers passed a resolution early in 1958 calling for better coordination.[6] Sixteen subject panels of the Secondary School Examinations Council were in existence by 1963.[7] These were to consider existing and proposed syllabuses and to suggest lines on which the C.S.E. examinations might develop, and presumably their work could be extended.

Union representation was, roughly, the formula adopted for teachers' membership of the Regional Governing Councils of the C.S.E. examinations, following the lines of the Burnham Committee. Inter-union rivalry was felt to be dangerous here.[8] The National Union of Teachers was already criticizing the fact that the C.S.E. schemes had no built-in provision for representation of the teachers' associations on the syllabus panels and examination committees.[1] Local subject associations were encouraged by many local authorities, and there were sounder arguments for connecting these with the C.S.E. Teacher-cooperation in examining, on a more intimate level than that of the remote subject committees of the examining boards, was advocated by Sir Cyril Norwood, and others, before the Second World War, but it was not until the 1960s that it came into its own at all. The Certificate of Secondary Education was designed to be governed and managed very largely by teachers, with ample scope for local initiative, and allowance for individually tailored syllabuses. Meetings of practising teachers were potentially stimulating and helpful from the point of view of sharing ideas and suggesting development, though they were to depend heavily in effectiveness on the calibre of the teachers locally. Several faults became apparent well before the 1960s. First, classroom teachers who devoted more than a certain amount of effort might easily find themselves acting as unpaid administrators, to the detriment of their own teaching. This was one of the points made by the College of Preceptors in its arguments against local secondary school examinations.[2] Secondly, there was little financial incentive to participate, as the rates of pay for marking G.C.E. scripts seemed likely to exceed those for the C.S.E. Thirdly, there was little long term profit in it for the ambitious young man or woman, whose chief reward was likely to be a glow of self-righteousness. Such persons, whose drive and enthusiasm were needed if these projects were to succeed, were better advised to attend courses in the vacation, or study to improve their academic qualifications. Constructive thought deserved to be harnessed and rewarded with honour, perhaps by a system of crediting marks for attendance at vacation courses, part-time study courses and study groups related to the construction of syllabuses, in connection with some sort of professional diploma arranged by the institutes of education. The institutes did not always work very closely with the schools, and many ambitious part-time students could be seen to have followed academic courses in education linked only tenuously with their own work in the schools, to judge by the titles of their theses.[3] Some M.A. and Ph.D. studies in Education at London University could be criticized because of their remoteness from practice. The partial replacement of the M.A. thesis with an M.A. written examination seemed likely to make the gap between theory and practice larger than ever, though it was probably carried out to prevent trivial researches being made.[4] The fact that institutes of education were often essentially university bodies emphasized the academic content of such higher studies. The more avowedly professional aspirations of the College of Preceptors may have appeared more suitable for professional studies, though the institutes of education were the obvious centres. Lack of wide recognition was a handicap here. The vital link was likely to be that of additional incremental allowances in the teachers' salary scales for those holding diplomas or certificates.[1] It was something of this sort that was needed, though at school or local level, to reward those who, by earnest study joined with constructive practical work, had shown themselves to have deserved financial recognition. The Bow Group proposed in 1964 that there should be two grades of professional qualification, amply backed by salary increments.[2]

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[1] *The Times Educational Supplement*, 19 June 1964, p. 1695.

[2] Regulations and Syllabuses for the G.C.E. Examinations, Summer 1964 and January 1965, pp. 79–83.

[3] J. L. Brereton: '*Recent Policy in School Examinations*'. *The General Certificate of Education*, 1961. Published by the Department of Education, King's College, Newcastle-upon-Tyne, pp. 14–15.

[4] *The Times Educational Supplement;* R. Jeal, 13 November 1957, p. 1197; H. M. Salinger, 16 January 1959, p. 79; A. M. Drury, 18 May 1962, p. 1017; 'Head of Department', 25 May 1962, p. 1081.

[5] *The Teaching of Science in Secondary Schools*, 1958, pp. 201–5.

[6] *The Times Educational Supplement*, 10 January 1958, p. 35.

[7] *The Times Educational Supplement*, 15 March 1963, p. 520; 'Questions in Parliament'.

[8] *The Times Educational Supplement*, 22 March 1963, p. 581; A. W. Chapman, letter.

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[1] N.U.T. Report for 1963, pp. 58–59.

[2] College of Preceptors. *External Examinations for Secondary Schools*, March 1956, p. 5.

[3] A. M. Blackwell: *A List of Researches in Education and Educational Psychology*, 1950 and subsequent years.

[4] University of London. Regulations for Internal Students, 1963–64, pp. 1465–66.

The easiest and most obvious way to control the school curriculum or to set up a new examinations system was to establish a team of experts for this purpose. An industrial firm might have gone about its business in just this way, securing the use of the best available men, paying them well and awaiting results as a return upon investment. Such an approach, though outwardly efficient in the short term view, would have ignored the therapeutic effect of securing the active cooperation of those actually involved in the works. In just such a way, long term success demanded that teachers at classroom level be involved to some extent in the control of the curriculum, and therefore of the examinations. There was, after all, a strong tradition of a teacher's independence in the classroom, and the Minister was determined that it should not be eroded. Central policy had, for many years, been linked with the recommendations of the Norwood Committee. Thus, though forced by circumstance to arrange for examinations with some degree of externality, the C.S.E. plans were designed to encourage the development of autonomy at classroom or local level.

The advantage of placing a small group of highly qualified persons, skilled in school subjects and in statistics, in a commanding position over the curriculum appeared attractive enough. The danger was that it would limit the freedom of teachers in their classrooms by exaggerating what could already be, at times, an almost bovine acceptance of the *status quo*, by virtually excluding teachers from determining their own affairs, and by removing a potential source of constructive discussion. The examiners would be placed in control of the curriculum of the schools, and the traditional liberty of the teacher would be undermined. It was against control of this sort that professional opinion was alerted after the Minister of Education's creation of the Curriculum Study Group in 1962.[3]

This last group had been, in fact, set up to help teachers, local authorities and bodies such as the Examinations Council.[4] Its function was to study in depth suitable problems concerning curricula and examinations. It was to act as a sort of clearing-house for ideas and information which would also enable ideas to be tried out – such as the 'multifacet test' mentioned earlier. The danger was that such a body might come to dictate developments in schools.

The working party which looked into matters of schools' curricula and examinations in 1964 asserted that teachers had insufficient scope generally for making or recommending modifications in the curriculum and examinations.[5] It was proposed that a representative body should be established to do the work of the Secondary School Examinations Council and much more besides. The new Schools Council for the Curriculum and Examinations would be virtually autonomous in its operation; it would represent professional interests and would control its own staff. Bodies such as the Curriculum Study Group would act in an advisory capacity.

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[1] *The Times Educational Supplement*, 25 October 1957, p. 1383; J. Vincent Chapman: 'Professional Status'.

[2] *Strategy for Schools, A Bow Group Pamphlet*, 1964, p. 103.

[3] *The Times Educational Supplement*, 15 March 1963, p. 525; 'Curriculum Study'.

[4] Ministry of Education. *Education in 1963* (Cmnd. 2316), p. 25.

[5] Ministry of Education. *Report of the Working Party on the Schools' Curricula and Examinations*, 1964, pp. 9–11.

It was not long before the National Foundation for Educational Research announced that it had been asked by the Schools' Council to set up a research unit for the C.S.E.[1] This was intended to provide the regional boards with information by means of a survey which would enable them to adjust their grades in the interests of national uniformity. It would also construct aptitude or reference tests. The idea was to set tests in a few schools in each area to gauge general standards and form a basis of comparison between different regions, and not to assess the abilities of individuals.[2] Such moves had been strongly opposed at sectional meetings of the National Union of Teachers, where it was felt that controls should be maintained by teachers. Nevertheless, the scientific approach to examining continued to be urged, and methods were propagated in Examinations Bulletins Nos. 3 and 4.[3]

One of the prizes that was being sought was recognition of the C.S.E. by professional and educational bodies and employers. A variety of bodies, including Oxford University and the Civil Service Commissioners, accepted 'grade one' of the C.S.E. as an alternative to a G.C.E. O level pass by the end of 1964.[4] Administrators and officials nevertheless strained anxiously after scientifically assessed uniformity.

The proposal for a wider Schools' Council was an attempt to weld together the knowledge and initiative of groups of specialists with the democratic processes of representative committees. The class teachers' interests could to some extent be safeguarded by their professional representatives. Such an organization could only claim to be successful if it helped to stimulate initiative in the classroom or at a local level. The true worth of any administrative changes would only become apparent over the years, by considering the general tone and extent of teachers' participation. The Chairman of the Secondary School Examinations Council stated that his council hoped that O level would disappear in favour of the C.S.E. by 'a kind of biological process'.[5] One of the attractive features of such an ideal would be lost unless practising teachers participated fully. There was danger in leaving the initiative in the hands of administrators and their examiners.

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[1] *The Times Educational Supplement*, 8 January 1965, p. 57.

[2] *The Times Educational Supplement*, 15 January 1965, p. 116.

[3] *Secondary School Examinations Council. Examinations Bulletin No. 3. The Certificate of Secondary Education: An Introduction to some techniques of examining*. And *Examinations Bulletin No. 4. The Certificate of Secondary Education: An introduction to objective-type examinations*, 1964.

[4] *The Times Educational Supplement*, 1 January 1965, p. 14.

[5] *The Times Educational Supplement*, 18 October 1963, p. 542.

Conclusion

Legend has it that the able English child was always given the opportunity of gaining the highest position in the land, regardless of birth. Raw recruits were encouraged to learn that field-marshals' batons were stowed in their knapsacks. Cabin boys, if honest, upright and brave, could equally become admirals. It is to be suspected that such tales struck the romantic fancy of the Victorians (so often hard-headed, 'selfmade' men themselves), and were thus perpetuated as ideals for future generations. Opportunity existed before the nineteenth century, however. Apprentices grew up and married their masters' daughters, and ultimately became Lord Mayors. Cardinal Wolsey could rise from obscurity to a position of immense power, and for many centuries the Church provided the surest route for promotion. A feudal society implied that noble birth was the greatest advantage, and a capitalist society favoured those with accumulated wealth, but this did not prevent poor but able people from tasting success. In short, there was always some social mobility.

When comparing this mobility with its modern equivalent, the striking feature is its haphazardness. Most able cabin boys finished their lives in galleys and forecastles. Clever apprentices coming of age, were dismayed to notice that their masters had sons but no daughters. Patronage favoured men indiscriminately. All this began to change in the nineteenth century, when the feeling that opportunity should be open to the able child was being turned from an ideal into a principle. Examinations provided the selection machinery to pick out those most deserving the opportunity; they were improved and modified to deal with ever-increasing numbers, as public education expanded.

The modern age has become so dominated by examinations that it may be difficult to take a view of them unclouded by prejudice. Those who pass examinations have an interest in encouraging their use and in emphasizing their advantages. Those who fail may be in danger of accepting a pessimistic view of their own abilities which could affect their whole future. Here lies a great danger, for even in a society geared to giving maximum opportunity, not because of personal but because of national demands, no means of selection can be tolerated which depresses the ambitions of those rejected. There was little lasting disgrace in failing an examination in the mid-nineteenth century, when only a small élite was generally involved. A century later, nearly everyone was examined and graded at one level or another, and opportunity for promotion was becoming steadily more available to those who passed the tests. But the sense of failure was to be savoured, more or less consciously, by correspondingly large numbers. Improved educational facilities, with fuller provision of O level courses, further education colleges and universities eased the situation, while various forms of secondary school reorganization were tried, to stave off selection or make it less final.

Examinations were important, and schools and colleges geared themselves to achieve good results. But there was a tendency to place to one side work which was not to be examined externally, and examinations came to be revered when knowledge might have been pursued for its own worth. Moral excellence and strength of character, though encouraged in schools by tradition, came second to examination facility when a pupil applied for employment or entrance to the next stage of education. Personal qualities could be assessed by schools better than by examining boards, and it was these rather than intellectual abilities which later formed the stumbling block to careers.[1]

The reform of examinations has mainly been associated with improvement of the tests and papers used. But the scientific approach to examining, if it may be so termed, lacked popular support despite the logic of the arguments which favoured it. Strong footholds were gained in the world of the eleven plus tests, many of which were designed with the utmost care. Some go-ahead local authorities introduced intelligence tests but later withdrew them when it was found that their 'backwash effect' on the primary schools had not been taken into account, suggesting that a conservative attitude may not have been unreasonable. But the eleven plus tests were repeatedly improved, so that validity and reliability increased a little with each year. Yet this was a matter of degree rather than of principle: there would always be rejection while there was selection. Improvements in test papers, while most desirable as expedients, tended to deflect attention from the basic administrative principles. Case-histories continued to 'prove the examiners wrong': administrative devices which removed the source of the worry were far more useful. The introduction of extended courses in modern schools, and of selection at a later age, as in Leicestershire, were potentially more valuable than new tests of slightly improved prognostic worth.

An historical study is often best for describing the English educational scene: it can bring in details from sociological and psychological researches while yet pursuing the thread of continuity. Most English administrative organisms benefit from this approach, for traditions persist, and are carried over from one generation to the next. Sudden administrative innovation on a large scale has been rare. Examinations were developed step by step, starting often in the nineteenth century, and only a few of the steps were large enough to have struck the public fancy. The ideal for administrative innovation is surely to achieve improved results with existing manpower and resources. A well-designed piece of administrative machinery will gain from the drive of the participants; the logical contradictions of a bad piece of machinery can bring out the worst from the people involved, as experience of the 1861 Revised Code showed.[2] Two examining systems may involve similar people and utilize similar examination papers. Yet one, being properly balanced, may be a success and the other a failure because an essential feature is lacking. The problem is to provide conditions in which enthusiasm and initiative can flourish. A proper delegation of functions to the teachers might form a first condition.

Assuming that a teacher has an understanding of his pupils as persons, the next essential is an enthusiasm for what he is teaching. Those who favour the extension of internal school examinations would claim that the labour of constructing a curriculum within a school could provide a very rewarding stimulus to thought.

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[1] *The Times*, 24 July 1963. J. H. R. Stokes, letter.

[2] See Chapter 2.

The Norwood Report had envisaged that the First Examination would wither away, leaving internal secondary school examinations instead. The Ministry of Education tended to encourage such ideals, even when forced by circumstances to arrange for external examinations. What was needed in designing a new examination system was something that would not merely tolerate a few isolated school or local experiments but would actually stimulate them. As it was, only the more progressive schools or those with sufficient reputation to carry weight at the universities bothered to arrange their own special G.C.E. syllabuses. The majority of wouldbe progressive teachers elsewhere adopted a passive attitude of uniformity instead of cooperating and constructing fresh syllabuses. The administrative system was in some way stifling creativeness.

The success of some of the local examinations in encouraging thought is showing the way. Certain aspects of some of the technical examinations and of those used in training colleges are equally valid, while universities have always been self-examining. It is to be hoped that the new C.S.E. organizations will refuse to be mesmerized by the demand for uniform standards. A common standard is, it is true, one of the advantages of a large-scale examination system; most employers understand the value of an O level pass, for example. Yet there are said to be deviations of standard between different G.C.E. boards, and these are the subject of criticism. How much more difficult it might appear if every district, or even every school, were to have a separate examination in each subject!

The answer is probably to place more reliance upon statistical checks, common objective tests for calibration, and follow-up tests of students' performances. Here is a place for the specialist, advising schools and examining boards upon the control of standards while being removed from any position of real power over the curriculum.

The large computer used since 1964 by the London G.C.E. Board, to cope with its 300,000 candidates annually, is welcome not only because it speeds the processing of data but also because it can be used to survey the vagaries of schools or of examiners almost incidentally.[1] Such machinery can help to cope with any mass examinations needed for calibration purposes.

Teachers' organizations participated in examining for many years, with representatives sitting on examination boards and subject committees. It is not so much at this level that teacher-participation of a new order is to be envisaged, necessary though it is, but at the level of the individual school. For examinations to be dynamic, activity and initiative need to spring from staffrooms rather than from distant committee meetings. There are signs of awareness in the 1960s, but it remains for the teachers in schools and colleges to grasp more eagerly the opportunities already available to them.

[1] *The Sunday Times*, 16 August 1964; 'A "Brain" examines the G.C.E. results.'

Bibliography

I A. ORIGINAL MANUSCRIPT SOURCES

Cheshunt Grammar School Records, 1961–64.

Letter from D. A. Quadling, Senior Mathematics Master at Marlborough College, to R. J. Montgomery, 21 July 1963.

Minutes of the East Hertfordshire Certificate of Secondary Education Mathematics Panel.

University of London Institute of Education, Teachers' Centre Archives; Letters to D. J. Johnston from local education officers, 1957.

I B. ORIGINAL RECORD SOURCES

Acts of Parliament: in chronological order.

The India Act, 1853.
The Oxford University Act, 1854.
The Cambridge University Act, 1856.
The Public Schools Act, 1868.
The Endowed Schools Act, 1869.
The Army Act, 1871.
The Tests Act, 1872.
The Universities Act, 1877.
The Universities of Oxford and Cambridge Act, 1877, (Oxford): Thirty-Six Statutes made by the University of Oxford Commissioners, 1882.
The Technical Instruction Act, 1889.
The Welsh Intermediate Education Act, 1889.
The Local Taxation (Customs and Excise) Act, 1890.
The Technical Instruction Act, 1891.
The University of London Act, 1898.
The Board of Education Act, 1899.
The Education Act, 1902.
The Education Act, 1918.
The Education Act, 1944.
The Education Act, 1962.

Government Publications: in chronological order.

Parliamentary Papers, from 1835 onwards.

Report from the Select Committee on Arts and Manufactures. Parliamentary Papers, v, 1835.

Estimates for the Year Ending 31st March 1837. Parliamentary Papers, XXXVIII, 1836.

Charters of the University of London and of University College London. *Parliamentary Papers*, XXXIX, 1837.

Minutes of Proceedings of the Committee of Privy Council on Education. *Parliamentary Papers*, XLI, 1839, and Minutes from 1839 onwards. These Minutes were published annually, and were the forerunners of the later annual reports of the Board or the Ministry of Education. They were occasionally gathered together in chronological order to form a convenient code of reference. See, for example, *Parliamentary Papers*, No. 158, 1855.

University of London Regulations for Matriculation, November 1839. *Parliamentary Papers*, XL, 1840.

Estimates for the Year Ending 31st March 1842. Parliamentary Papers, II, 1841.

Report from the Select Committee on the School of Design. Parliamentary Papers, XVIII, 1849.

Second Report of the Commissioners for the Exhibition of 1851. Parliamentary Papers, LIV, 1852–53.

Estimates for the Year Ending 31st March 1853. Parliamentary Papers, Class IV, XXIX, 1852.

The Report of Her Majesty's Commissioners appointed to inquire into the State, Discipline, Studies and Revenues of the University of Cambridge. (C.U.C. Report), 1852.

The Report of Her Majesty's Commissioners appointed to inquire into the State, Discipline, Studies and Revenues of the University of Oxford. (O.U.C. Report), 1852.

First Report of the Department of Practical Art. Parliamentary Papers, LIV, 1853.

Parliamentary Debates, from 1853 onwards.

First Report of the Department of Science and Art (C. 1783). *Parliamentary Papers*, XXVIII, 1854, and subsequent Reports to 1898.

Report on the Organization of the Permanent Civil Service; together with a letter from the Rev. B. Jowett (C. 1713). *Parliamentary Papers*, XXVII, 1854.

Reports of Committees of Inquiry into Public Offices, and Papers connected therewith (C. 1715). *Parliamentary Papers*, XXVII, 1854.

Fifth Report of the Commissioners for the Exhibition of 1851. Parliamentary Papers, XXIII, 1867.

First Report of Her Majesty's Civil Service Commissioners (C. 2038), 1856, and subsequent Reports to 1920.

First Report of the Council of Military Education (C. 2603). *Parliamentary Papers*, XXIV, 1860, and subsequent Reports.

Report of the Commissioners appointed to Inquire into the State of Popular Education in England (Newcastle Commission), 1861.

The Report of Her Majesty's Commissioners appointed to Inquire into the Revenues and Management of Certain Colleges and Schools (Clarendon Commission), 1864.

Report from the Select Committee on Schools of Art. Parliamentary Papers, XII, 1864.

Report of the Schools Inquiry Commission (Taunton Commission), 1868.

Report of the Select Committee on the Endowed Schools Bill, with the Proceedings of the Committee (C. 208). *Parliamentary Papers*, VIII, 11 May 1869.

Endowed Schools Commission Scheme for the Management of the School at Ilkley, in the West Riding of Yorkshire. Parliamentary Papers, XLVI, 1872.

Report from the Select Committee on the Endowed Schools Act (1869), together with Minutes of Evidence and Appendix (C. 254), 17 June 1873.

The Royal Commission Report on the Universities of Oxford and Cambridge, 1874. Vol. I (C. 856), 1873.

Endowed Schools Commission Scheme for the Management of Sir Andrew Judd's School at Tonbridge. Parliamentary Papers, LIV, 1880.

Royal Commission on Technical Instruction, 1882–84. Second Report (C. 3981), 1884.

Final Report of the Commissioners Appointed to Inquire into the Elementary Education Acts (C. 5485), 1888.

Education Department Circular 303, 8 June 1891. Circular to Day Training Colleges – General Examination Paper. (See *Report of the Committee of Council on Education* (Cd. 6438), 1890–91).

The Royal Commission on Secondary Education, Report of the Commissioners (Bryce Commission) (C. 7862), 1895.

Statutes made for the University of London by the Commissioners appointed under the University of London Act, 1898 (Cd. 83), 1900.

Board of Education. Special Reports on Educational Subjects, Vol. 6 (Cd. 418), 1900.

Board of Education. Specimen Courses of Instruction for Training Colleges suggested by the Board of Education, August 1901. (See Circular 454).

Board of Education Circular 454, 19 June 1901. 'A Two Years' Continuous Course of Study'.

Report of the Board of Education for the Year 1902–03 (Cd. 1763), and subsequent Reports to 1938.

Board of Education Regulations for the Instruction and Training of Pupil Teachers in 1903 (Cd. 1666).

Board of Education Regulations for Secondary Schools, 1903 (Cd. 1668).

Board of Education Regulations for Secondary Schools, 1904–05 (Cd. 2128).

Board of Education Regulations for Evening Schools, Technical Institutions and Schools of Art and Art Classes, 1904–05 (Cd. 2172).

Report of the Consultative Committee upon Questions Affecting Higher Elementary Schools, 1906.

Board of Education Regulations for the Preliminary Education of Elementary School Teachers, 1907 (Cd. 3444).

Board of Education Regulations for Technical Schools, Schools of Art, and other Schools and Classes for Further Education, 1907 (Cd. 3555).

Board of Education Regulations for Secondary Schools, 1907–08 (Cd. 3592).

Board of Education Statistics of Public Education in England and Wales, 1907–08 (Cd. 4885). Also in subsequent years.

Board of Education Memorandum No. 21. The Status and Duties of Inspectors employed by Local Education Authorities, 6 January 1910. (The Holmes Circular).

Board of Education Circular 776, 20 June 1911. Science Examinations and Grouped Course Certificates.

Board of Education. Report of Consultative Committee on Examinations in Secondary Schools (Cd. 6004), 1911.

Board of Education. Statement of Grants Available in Aid of Technological and Professional Work in the Universities in England and Wales (Cd. 6270), 1912.

The Royal Commission on University Education in London. The Fifth Report of the Commissioners (Cd. 6312), 1912.

Board of Education Circular 826, September 1913. Curricula of Secondary Schools.

Board of Education Circular 849, July 1914. Examinations in Secondary Schools.

Board of Education Circular 933, December 1915. The Examination of Secondary Schools.

Board of Education Circular 996, 25 May 1917. Examination of Secondary Schools.

Board of Education Circular 1002, 15 June 1917. Scheme for the Better Organization of Examinations in Secondary Schools.

Board of Education Circular 1010, 12 September 1917. Circular to Local Education Authorities and Secondary Schools.

Board of Education Circular 1026, 5 February 1918. Examinations in Science and Technology.

Board of Education Circular 1034, 11 March 1918. Circular to Local Education Authorities and Secondary Schools.

Board of Education Regulations for Secondary Schools, 1918 (Cd. 9076).

Board of Education Circular 1116, 5 July 1920. Circular to Local Education Authorities and Secondary Schools.

Board of Education. Report of the Departmental Committee on Scholarships and Free Places (Cd. 968), 1920.

Board of Education Circular 1260, 18 May 1922. Circular to Local Education Authorities (Part II) and Secondary Schools.

Board of Education Circular 1340, 4 September 1924. Circular to Local Education Authorities and Governing Bodies.

Board of Education. Report of the Consultative Committee on Psychological Tests of Educable Capacity and their Possible Use in the Public System of Education, 1924.

Board of Education Circular 1372, 11 December 1925. Circular to Local Education Authorities and Training College Authorities.

Board of Education. Report of a Departmental Committee on the Training of Teachers for Public Elementary Schools (Cmd. 2409), 1925.

Board of Education. Report of the Consultative Committee on the Education of the Adolescent, 1926. (Hadow Report).

Board of Education. Educational Pamphlet No. 63. Free Place Examinations, 1928.

Board of Education. Report of the Departmental Committee on Examinations for Part-Time Students, 1928.

Board of Education Circular 1408, 20 August 1930. Central Advisory Committee for the Certification of Teachers.

Board of Education. Report of the Consultative Committee on the Primary School, 1931.

Report of the Committee on National Expenditure (Cmd. 3920), 1931.

Report of the Panel of Investigators into the School Certificate Examinations of the University of London, 1931.

Report of the Committee on Local Expenditure (Cmd. 4200), 1932.

Board of Education. The School Certificate Examination, being the Report of the Panel of Investigators appointed by the Secondary School Examinations Council to Enquire into the Eight Approved School Certificate Examinations held in the Summer of 1931, 1932.

Board of Education Circular 1448, 24 March 1936. Secondary School Examinations Council.

Board of Education. Report of the Consultative Committee on Secondary Education, with Special Reference to Grammar Schools and Technical High Schools (Spens Report), 1938.

Board of Education. The Higher School Certificate Examination, being the Report of the Panel of Investigators Appointed by the Secondary School Examinations Council to Enquire into the Eight Approved Higher School Certificate Examinations held in the Summer of 1937, 1939.

Board of Education. Curriculum and Examinations in Secondary Schools (Norwood Report), 1943.

Board of Education. Teachers and Youth Leaders; Report of the Committee Appointed by the Board of Education to Consider the Supply, Recruitment and Training of Teachers and Youth Leaders (McNair Committee), 1944.

Ministry of Education. Higher Technological Education. Report of a Special Committee Appointed in 1944 (Percy Report), 1945.

S.R.O. 1945, No. 666, as amended. The Regulations for Scholarships and other Benefits, 1945.

S.R.O. 1945. Ministry of Education Grant Regulations No. 2.

Ministry of Education Circular 112, 11 June 1946. Organization of the Training of Teachers.

Ministry of Education Circular 113, 26 June 1946. Secondary School Examinations Council.

Ministry of Education Pamphlet No. 3. Youth's Opportunity; Further Education in County Colleges, 1946.

Scientific Manpower. The Report of a Committee Appointed by the Lord President of the Council (Cmd. 6824), 1946. (Barlow Report).

Education in 1947. Report of the Ministry of Education and the Statistics of

Public Education for England and Wales (Cmd. 7426), and Reports in subsequent years to 1963.

Ministry of Education Circular 144, 16 June 1947. Organization of Secondary Education.

Ministry of Education Circular 151, 18 July 1947. School Records of Individual Development.

Ministry of Education Pamphlet No. 9. The New Secondary Education, 1947.

Ministry of Education. Examinations in Secondary Schools. First Report of the Secondary School Examinations Council, 1947.

Ministry of Education Circular 168, 23 April 1948. Examinations in Secondary Schools. Report of the Secondary School Examinations Council.

Ministry of Education. University Awards. The Report of the Working Party on University Awards, 1948.

Ministry of Education Circular 205, 6 September 1949. Examinations in Secondary Schools.

Ministry of Education Circular 227, 28 September 1950. Professional Bodies' Requirements in Terms of the G.C.E.

Ministry of Education Circular 256, 4 September 1952. Examinations in Secondary Schools.

The Schools Grant Amending Regulations No. 3 (S.I. 1952, No. 1815).

Ministry of Education Circular 263, 2 March 1953. Selection for Local Education Authority Awards at Universities.

Ministry of Education. Early Leaving; A Report of the Central Advisory Council (England), 1954.

Ministry of Education Circular 289, 9 July 1955. Examinations in Secondary Schools.

Ministry of Education. Technical Education White Paper (Cmd. 9703), 1956.

Ministry of Education Circular 326, 3 July 1957. Examinations in Secondary Schools.

Ministry of Education Pamphlet No. 34. The Training of Teachers; Suggestions for a three-year training college course, 1957.

Ministry of Education Circular 339, 5 June 1958. Awards at Universities and other Institutions of Further Education.

Ministry of Education. Secondary Education for All, a New Drive (Cmnd. 604), 1958.

Ministry of Education. National Advisory Council on Education for Industry and Commerce; a Report on the Wastage of Students from Part-Time Technical and Commercial Courses, 1959.

Ministry of Education. Report of the Central Advisory Council for Education (England). 15 to 18. 1959. (Crowther Report).

Ministry of Education and the Scottish Education Department. Grants to Students (Cmnd. 1051), 1960.

Ministry of Education. Secondary School Examinations other than the G.C.E. Report of a Committee Appointed by the S.S.E.C. in July 1958 (Beloe Committee), 1960.

Ministry of Education. The General Certificate of Education and Sixth Form Studies. The Third Report of the Secondary School Examinations Council, 1960.

Ministry of Education. Better Opportunities in Technical Education (Cmnd. 1254), 1961.

Ministry of Education. Examinations in Secondary Schools. The Certificate of Secondary Education. The Fourth Report of the Secondary School Examinations Council. A proposal for a new school leaving examination other than the G.C.E., 1961.

Ministry of Education. Statistics of Education for 1961, and succeeding years.

Ministry of Education Circular 5/62, 24 August 1962. Professional Bodies' Requirements in Terms of the G.C.E.

Ministry of Education Circular 9/62, 24 October 1962. Awards for First Degree and Comparable Courses. The University and Other Awards Regulations, 1962.

Ministry of Education. Examinations in Secondary Schools. The Certificate of Secondary Education. The Fifth Report of the Secondary School Examinations Council, 1962.

Ministry of Education. Sixth Form Studies and University Entrance Requirements. The Sixth Report of the Secondary School Examinations Council, 1962.

Ministry of Education. Report of the Committee on Higher Education (Cmnd. 2154), 1963. (Robbins Report).

Ministry of Education. The Scope and Standards of the Certificate of Secondary Education. The Seventh Report of the Secondary School Examinations Council, 1963.

Secondary School Examinations Council. Examinations Bulletin No. 1. *The Certificate of Secondary Education*, 1963.

Ministry of Education. Report of the Working Party on the Schools' Curricula and Examinations, 1964.

Department of Education and Science. The Examining of English Language. The Eighth Report of the Secondary School Examinations Council, 1964.

Secondary School Examinations Council. Examinations Bulletin No. 2. *Experimental Examinations – Mathematics*, 1964.

Secondary School Examinations Council. Examinations Bulletin No. 3. *The Certificate of Secondary Education: An introduction to some techniques of examining*, 1964.

Secondary School Examinations Council. Examinations Bulletin No. 4. *The Certificate of Secondary Education: An introduction to objective-type examinations*, 1964.

Miscellaneous Reports and Official Publications: in chronological order.

Statutes for the University of Cambridge and for the Colleges within it. H. Bradshaw (ed.), Cambridge, 1883.

The Honours Register of the University of Oxford. Clarendon Press, Oxford, 1883.

A Short Notice of the City and Guilds of London Institute, with an Account of the Proceedings at the Opening of the Central Institution, 25 June 1884.

City and Guilds of London Institute. Report of the Council to the Members of the Institute for the Year 1884, and Reports for subsequent years to 1962–63.

University of London Historical Record. University of London Press, 1836–1912, also 1836–1926.

The Historical Register of the University of Cambridge to the year 1910. J. R. Tanner (ed.), Cambridge University Press, 1917.

The Dictionary of National Biography. Oxford University Press, 1921–22.

Examinations in Public Elementary Schools, 1930. *The Report of an Enquiry Undertaken by the Joint Advisory Committee of the Association of Education Committees and the National Union of Teachers into Examinations for Pupils in Public Elementary Schools.* (*Education*, and *The Schoolmaster*, London.)

The Selective Central School. The Report of an Enquiry conducted by the National Association of Teachers in Selective Central Schools, 1934.

A Conspectus of Examinations in Great Britain and Northern Ireland. Sir P. Hartog and G. Roberts. International Institute Examinations Enquiry. Macmillan, London, 1937.

Oxford and Cambridge Schools Examinations Board. 66th Annual Report, 1939.

School Certificate Mathematics. The Report of a Conference of Representatives of the Examining Bodies and Teachers' Associations, with a Suggested Alternative Syllabus and Specimen Papers. Cambridge University Press, 1944.

County Borough of Barrow-in-Furness Education Committee, Classification for Secondary Education, 1946.

London County Council. London School Plan. L.C.C. 1947.

City and Guilds of London Institute. Memorandum on the Origin, Development and Work of the Institute, 1949.

National Union of Teachers; Report of a Consultative Committee. Transfer from Primary to Secondary Schools. Evans, 1949.

Oxford and Cambridge Schools Examinations Board. Regulations for Certificate Examinations for the Year 1951.

University of Cambridge Local Examinations Syndicate. General Certificate of Education Regulations for 1951.

University of Durham Schools Examination Board. Regulations for the Award of the General Certificate of Education, 1951.

University of Bristol. General Regulations and Syllabus Governing the General Certificate of Education to be held in 1952.

The Educational Work of the I.A.A.M. The Incorporated Association of Assistant Masters, 1954.

51st Annual Report to the Universities constituting the Joint Matriculation Board, 1954, and subsequent Reports.

Joint Matriculation Board. Technical and Commercial Subjects in the General Certificate Examination, January 1954.

Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom. Report of a Sub-Committee on University Entrance Requirements, London, 1955.

Hertfordshire County Council Education Committee. *The Secondary Modern School, the First Ten Years and the Next Ten*, 1955.

Northern Universities Joint Matriculation Board. *Secondary Modern Schools and the G.C.E.* 1955.

Oxford University Institute of Education Handbook, 1955.

College of Preceptors. *External Examinations for Secondary Schools*, March 1956.

A Survey of the S.W. Hertfordshire Certificate of Education 1951–56. Divisional Education Office, Watford.

Harrow Schools Leaving Certificate, Summary of a Scheme. W. H. J. Knight, Borough Education Officer, November 1957.

R. K. Kelsall: *Report of Inquiry into Applications for Admission to Universities*. Committee of Vice-Chancellors and Principals of Universities of the British Commonwealth, 1957.

Regulations for the Conduct of the Harrow Schools Leaving Certificate Examinations in Secondary Schools. Harrow, November 1957.

University of London Institute of Education. Regulations and Syllabuses for the Teacher's Certificate Examination, 1956–57 and subsequent years.

Cheshire Education Committee. *Incentives, External Examinations, School Leaving Certificates and the Secondary Modern School Pupil's Record Card*. Chester, 1958.

City of Sheffield Education Committee. Reports on Examinations in Secondary Schools and Organization in Secondary Modern Schools, 1958.

Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom. Report of an Ad Hoc Committee on Procedure for the Admission of Students, 1958.

The Institution of Mechanical Engineers. Rules for Examinations and for the Submission of Theses. July 1958.

The Kent Education Committee. *Education in Kent*. 1953–58.

Lindsey County Council, Scunthorpe Divisional Executive. *The School Leaving Certificate*. Syllabuses, 1957 and 1958.

Lindsey County Council, South East Lindsey. *The Secondary Schools Leaving Certificate*. Syllabus, 1958.

Report of the Keighley Certificate Examinations Board. Keighley Education Committee, 1958.

The Royal Institute of Chemistry. Regulations for Admission to Membership, June 1958.

Southern Universities Joint Board for School Examinations. General Regulations and Syllabus for the General Certificate of Education Examinations, 1958.

University of Cambridge Local Examinations Syndicate. One Hundredth Annual Report to the University, 1958, and subsequent Reports.

University of London Regulations for the General Certificate of Education Examination, Summer 1960 and January 1961, 1958, and subsequent Regulations.

Associated Examining Board. Report for the Period 1 October 1958 to 30 September 1959.

The National Council for Technological Awards. List 10, 31 March 1959.

The National Council for Technological Awards. Report for the Period August 1957 to March 1959. Second Report, 1959.

The National Union of Teachers. *University Entrance*, 1959.

The National Union of Teachers Report for 1960, and Reports for succeeding years.

Oxford University Department of Education Report. *Arts and Science in the Sixth Form*. March 1960. (Gulbenkian Foundation).

Reports of the Oxford and Cambridge Committees on Entrance to Oxford and Cambridge. Oxford University Press and Cambridge University Press, 1960.

University of London General Certificate of Education Subject Reports, Summer 1960, and subsequent Reports.

Association of University Teachers. Submission to the Committee on Higher Education, 1961.

City and Guilds of London Institute. General Regulations, 1961.

City and Guilds of London Institute. Heating and Ventilating Engineering Regulations and Syllabuses for 1961.

A Commentary by the Council of the College of Preceptors on Secondary School Examinations Other than the G.C.E. College of Preceptors, 1961.

W. D. Furneaux: *The Chosen Few*. The Nuffield Foundation. Oxford University Press, 1961.

The London County Council. *The London Education Service*. L.C.C. 1961.

L.C.C. Secondary Schools Certificate Examination. Regulations and Syllabuses. R.S.A. 1961.

National Union of Teachers Policy Statement. *The G.C.E. O level. Should it be Reformed?* N.U.T., 1961.

The Royal Society of Arts. Report on the Examinations for the Session 1960–61.

Statutes of the University of Cambridge. Cambridge University Press, 1961.

Teachers' Information Guide and College of Preceptors Calendar, 1960–61.

Union of Educational Institutions. Secondary School Certificate Regulations and Syllabuses. Birmingham, 1961.

Union of Lancashire and Cheshire Institutes. Secondary School Certificate Regulations and Syllabuses. Manchester, 1961.

Royal Society of Arts. Ordinary (Single Subject) Examinations, Regulations and Syllabuses, 1961.

The Committee of Vice-Chancellors and Principals. Report of a Sub-Committee on University Entrance Requirements, April 1962.

County Borough of Croydon. *Secondary Education in Croydon*, a Consolidated Report, July 1962.

Northern Counties Technical Examinations Council. Question Papers, Reports of Examiners, and Statistics for the Northern Counties School Certificate Examinations. Newcastle, 1962.

The Public and Preparatory Schools Year Book. Black, 1962.

The School Mathematics Project. Director's Report. Southampton, 1961–62, and 1962–63.

University of Bristol Institute of Education. Certificate of Education and Supplementary Certificate; Handbook of Regulations, Courses of Study and Syllabuses. October 1962.

Union of Lancashire and Cheshire Institutes. General Regulations, 1961–62.

University of London. Report by the Principal, 1961–62.

The Year Book of Technical Education and Careers in Industry. H. C. Dent (ed.), Black, 1962, 1963 and 1964.

The College of Preceptors. Regulations for the A.C.P. and L.C.P. Examinations from 1963 onwards.

The College of Preceptors. *Certificate and Senior Certificate Examinations*, 1963, Report of the Examiners.

East Midland Educational Union. Secondary School Certificate Regulations and Syllabuses. Nottingham, 1963.

Hertfordshire County Council. *The Certificate of Secondary Education*. Report approved by the Education Committee on 14 January 1963.

Hertfordshire County Council. *Certificate of Secondary Education; First Progress Report*. Report approved by the Education Committee on 8 April 1963.

The Institute of Handicraft Teachers and the College of Handicraft. *The Certificate of Secondary Education*, July 1963.

The London Chamber of Commerce (Incorporated). Regulations, Syllabuses, and Timetables of Examinations, 1963.

Northern Counties Technical Examinations Council. Certificate of Secondary Education, Regulations and Syllabuses, 1963.

The Nuffield Foundation Science Teaching Project. Progress Report. October 1963.

Oxford University Department of Education. *Technology and the Sixth Form Boy*, 1963.

Royal Society of Arts. School Certificate Examinations. 1963.

University of London. B.A. Honours and B.Sc. Special Examinations; Mathematics, 1963, etc.

University of London Calendar, 1963.

University of London. Regulations for Internal Students, 1963–64.

University of London. G.C.E. Papers in Mathematics, Summer 1964, etc.
University of London. Payments to Examiners for Examinations in and after Summer 1963. (1, G.C.E. Chief Examiner.)
Midlands Mathematical Experiment Report 1962–63. Harrap, 1964.
Strategy for Schools, *A Bow Group Pamphlet*. Conservative Political Centre, 1964.
Universities Central Council on Admissions. First Report, 1961–63. 1964.

1 C PERIODICALS AND NEWSPAPERS: Reference has been made to one or more editions of the following journals. Details of the more important articles may be found under their authors' names in the list of secondary sources.

The A.M.A., the Journal of the Assistant Masters' Association.
The British Journal of Educational Studies.
The Edinburgh Review.
Education.
The Educational Times.
The Forum of Education.
The Hornsey Journal.
The Journal of Education.
The Journal of Experimental Pedagogy.
The Journal of the Society of Arts.
Macmillan's Magazine.
The Mathematical Gazette.
Mathematics Teaching.
The Mill Hill Magazine.
The Monthly Magazine.
The National Review.
The Nineteenth Century.
The Pall Mall Gazette.
The School Science Review.
The Sunday Times.
The Teachers' World.
Technology.
The Times.
The Times Educational Supplement.
Universities Quarterly.
The Use of English.

SECONDARY SOURCES: Listed by their authors' names, in alphabetical order.

A. ABBOTT: *Education for Industry and Commerce in England.* Oxford University Press, 1933.

'National Certificates for Students in Technical Schools.' International Institute Examinations Enquiry: *Essays on Examinations*, 1936, q.v.

'The Scholarship System in Secondary Schools.' *The Journal of Education*, December 1932.

T. D. ACLAND: *Some Account of the Origin and Objects of the New Oxford Examinations for the Title of Associate in Arts, and Certificates for the Year 1858.* J. Ridgeway, 2nd edn., 1858.

W. ALLCHIN: *An Account of the Reconstruction of the University of London.* H. K. Lewis, 1905–12.

N. ANNAN: 'Peck Orders among Universities.' *Universities Quarterly*, XV, 1960–61.

ANON: 'The University of London and Middle Class Education', *The National Review*, 1857, pp. 222–30.

R. ARMFELT: *The Structure of English Education.* Cohen and West, 1955.

M. ARNOLD: *Reports on Elementary Schools.* F. Sandford (ed.), 1889.

T. ARNOLD: *The Miscellaneous Works of Thomas Arnold.* B. Fellowes, 1845.

E. ASHBY: *Technology and the Academics.* Macmillan, 1958.

C. M. ATKINSON: *Jeremy Bentham.* Methuen, 1905.

K. AUSTWICK: 'G.C.E. to B.A.' *Universities Quarterly*, XV, 1960–61, pp. 64–71.

C. W. BAILEY: 'Scholarships and Secondary Schools.' *The Journal of Education*, September 1923.

Steps Towards Educational Reform. Cambridge University Press, 1913.

W. W. ROUSE BALL: *A History of the Study of Mathematics at Cambridge.* Cambridge University Press, 1889.

P. B. BALLARD: *The Journal of Experimental Pedagogy*, 1914, II, p. 396 and 1915, III, p. 153.

'The Special Place Examination.' International Institute Examinations Enquiry: *Essays on Examinations*, 1936, q.v.

O. L. BANKS: 'Morant and the Secondary School Regulations of 1904.' *The British Journal of Educational Studies*, 1954–55.

Parity and Prestige in English Secondary Education. Routledge and Kegan Paul, 1955.

A. BELL: *An Analysis of the Experiment in Education made at Egmore near Madras.* Murray, 1807, 3rd edn.

J. BENTHAM: *Chrestomathia.* Payne and Foss and R. Hunter, 1816–17.

Constitutional Code, 1827. (See J. Bowring: *The Works of Jeremy Bentham*, IX. Willis, Edinburgh, 1843.)

C. BIBBY: *T. H. Huxley, Scientist, Humanist and Educator.* Watts, 1959.

C. BIRCHENOUGH: *History of Elementary Education in England and Wales from 1800 to the Present Day*. University Tutorial Press, 3rd edn., 1938.

E. L. BLACK: 'The Marking of G.C.E. Scripts.' *British Journal of Educational Studies*, XI, November 1962.

A. M. BLACKWELL: *A List of Researches in Education and Educational Psychology*. Newnes, 1950 and subsequent years.

E. BLISHEN (ed.): *Changing Schools, the Problems of Selection and some Solutions*. Council for Childrens' Welfare, 54, Platts Lane, N.W.3, 1959.

J. BOOTH (THE REV.): *Examination the Province of the State, or the outlines of a Practical System for the extension of National Education*. Parker, 1847.

How to Learn and What to Learn. Society of Arts, 1856.

R. BORCHARD: *John Stuart Mill the Man*. Watts, 1957.

L. BOUYER: *Newman, his Life and Spirituality*. (Transl. J. Lewis May.) Burns and Oates, London, 1958.

J. L. BRERETON: *The Case for Examinations*. Cambridge University Press, 1944.

'Recent Policy in School Examinations.' *The General School Certificate of Education*, 1961. Published by the Department of Education, King's College, Newcastle-upon-Tyne.

THE BRITISH INSTITUTE OF MANAGEMENT: *Merit Rating*. 1954.

H. BROUGHAM: *The Scientific Education of the People* (Signed William Davies). *The Edinburgh Review*, October 1824.

G. BRUCE: 'The Same Old Rose? A Harder Look at the C.S.E.' *The Times Educational Supplement*, 1 May 1964, p. 1156.

P. M. H. BRYANT: *Harrow*. Blackie, 1936.

J. BURNHAM: *The Managerial Revolution*. 1941. Putnam, 1944.

E. B. BUTLER: 'Sorting Students Mechanically.' *Universities Quarterly*, XIV, 1959–60.

G. A. CAMPBELL: *The Civil Service in Britain*. Pelican, 1955.

N. CARLISLE: *A Concise Description of the Endowed Grammar Schools in England and Wales*. Baldwin, Craddock and Joy, 1818.

A. M. CARR-SAUNDERS and P. A. WILSON: *The Professions*. Clarendon Press, Oxford, 1933.

CENTRAL SOCIETY OF EDUCATION: First Publication. Taylor and Walton, 1837.

E. CHADWICK: *The Evils of Disunity in Central and Local Administration especially with relation to the metropolis, and also on the New Centralisation for the People*. Longmans, Green, 1885.

CARADEUC DE LA CHALOTAIS: *Essai d'Education Nationale, ou Plan d'Etudes pour la Jeunesse*. Rennes, 1763.

W. S. CHURCHILL: *My Early Life, A Roving Commission*. Thornton Butterworth, 1930.

COLLEGE OF PRECEPTORS: *Fifty Years of Progress in Education*, 1896.

C. W. COOK: 'The Scholarship System in Elementary Schools.' *The Journal of Education*, September 1923.

E. COPLESTON: *A Reply to the Calumnies of* The Edinburgh Review *against Oxford; containing an Account of Studies pursued in that University.* Oxford, printed privately, 1810.

W. T. COSTELLO: *The Scholastic Curriculum at early seventeenth century Cambridge.* Harvard University Press, 1958.

LORD CURZON OF KEDLESTON: *Principles and Methods of University Reform.* Clarendon Press, Oxford, 1909.

C. DARWIN: *Origin of Species by means of Natural Selection.* Murray, 1859.

H. C. DENT: 'From Figments to Facts.' R. R. Pedley (ed.): *Comprehensive Schools Today*, 1955, q.v.

R. R. DOBSON: 'The Value of Intelligence Tests in Scholarship Examinations.' *The Forum of Education*, February 1923.

E. EAGLESHAM: *From School Board to Local Authority.* Routledge and Kegan Paul, 1956.

E. EDWARDS: *Metropolitan University; Remarks on the Ministerial Plan of a Central University Examining Board.* Effingham Wilson, Royal Exchange, 1836.

K. H. REESE EDWARDS: *Classification for Secondary Education.* Wigan Printing Co., 1951.

T. S. ELIOT: *Notes Towards the Definition of Culture.* Faber, 1948. Fifth impression.

C. R. EVERS: *Rugby.* Blackie, 1939.

J. D'E. FIRTH: *Winchester College.* Winchester Publications, London, 1949.

J. E. FLOUD and A. H. HALSEY: 'Intelligence Tests, Social Class and Selection for Secondary Schools. *British Journal of Sociology*, VIII, No. 1, March 1957.

J. E. FLOUD (ed.), A. H. HALSEY and F. M. MARTIN: *Social Class and Educational Opportunity.* Heinemann, 1956.

J. K. GALBRAITH: *The Affluent Society.* 1958. Pelican, 1962.

F. GALTON: *Enquiries into the Human Faculty and its Development.* Macmillan, 1883.

D. V. GLASS (ed.): *Social Mobility in Britain.* Routledge and Kegan Paul, 1954.

G. J. GOSCHEN: 'Since 1880.' *The Nineteenth Century*, No. XCVIII, April 1885, pp. 723–32.

C. GRAD: 'Recent Developments Affecting the Patterns of Craft, Technical and Technological Training.' B.E.A.M.A. Education Conference Report of Papers and Discussions. London, 1957.

D. GRANICK: *The Red Executive; A Study of the Organization Man in Russian Industry.* Macmillan, 1960.

J. GRAVES: *Policy and Progress in Secondary Education, 1902–1942.* Thomas Nelson, 1943.

J. L. GRAY and P. MOSHINSKY: 'Ability and Opportunity in English Education.' *Sociological Review*, April 1935, XXVII, No. 2.

J. M. GRAY: *A History of the Perse School, Cambridge.* Bowes and Bowes, Cambridge, 1921.

E. HALÈVY: *The Growth of Philosophic Radicalism* (transl. M. Morris). Faber, 1934.

J. R. HALL and D. V. GLASS: 'Education and Social Mobility.' D. V. Glass (ed.), *Social Mobility in Britain*, 1954, q.v.

A. H. HALSEY: 'A Pyramid of Prestige.' *Universities Quarterly*, XV, 1960–61.

SIR W. HAMILTON: *Discussions on Philosophy and Literature, Education and University Reform.* 2nd edn. Longmans, 1853.

F. C. HAPPOLD: *Vision and Craftsmanship.* Faber, 1949.

SIR P. HARTOG: *Examinations and their Relation to Culture and Efficiency.* Constable, 1918.

Secondary School Examinations and the Curricula of Secondary Schools, with Suggestions for Reform. National Union of Teachers, 1937.

SIR P. HARTOG and E. C. RHODES: 'An Examination of Examinations.' International Institute Examinations Enquiry. Macmillan, 1935.

SPURLEY HEY: *The Central School Examination.* Manchester Education Committee, 1929.

MARGARET HIGGINSON: 'Grammar School Streaming, the Case Against.' *The Times Educational Supplement*, 10 May 1963.

C. P. HILL: *The History of Bristol Grammar School.* Pitman, 1951.

J. HOLE: *An Essay on the History and Management of Literary, Scientific and Mechanics' Institutions*, etc. Longmans, 1853.

C. HOPE: 'A New O level Syllabus in Mathematics. *Mathematics Teaching*, Spring 1963.

J. W. HUDSON: *The History of Adult Education.* Longmans, 1851.

D. HUDSON and K. W. LUCKHURST: *The Royal Society of Arts, 1754–1954.* Murray, 1954.

A. G. HUGHES and E. H. HUGHES: *Learning and Teaching.* Longmans, Green, 1937.

M. HUTCHINSON and C. YOUNG: *Educating the Intelligent.* Pelican, 1962.

International Institute Examinations Enquiry: *Essays on Examinations.* Macmillan, 1936.

G. B. JEFFERY (ed.): *External Examinations in Secondary Schools.* Harrap, 1958.

Joint Committee of the Incorporated Association of Assistant Masters and the Science Masters Association: *The Teaching of Science in Secondary Schools.* Murray, 1958 edn.

L. G. E. JONES: *The Training of Teachers in England and Wales.* Oxford University Press, 1924.

L. KANDELL: 'Examinations and their Substitutes in the United States, 1936.' Carnegie Foundation for the Advancement of Teaching, Bulletin 28.

SIR G. W. KEKEWICH: *The Education Department and After*. Constable, 1920.

T. KELLY: *George Birkbeck*. Liverpool University Press, 1957.

H. LATHAM: *On the Action of Examinations Considered as a Means of Selection*. Bell and Sons, Cambridge, 1877.

P. LAWRENCE: *Sixth Form Leavers and Higher Education*. N.U.J.M.B., 1963.

A. F. LEACH: 'The True Meaning of Free School.' *The Journal of Education*, July 1908.

Winchester College. Duckworth, 1899.

H. D. P. LEE: 'Sixth Form Studies', 1961. Address at the N.U.T. Grammar School Meeting of the Brighton Conference.

J. LEESE: *Personalities and Power in English Education*. E. J. Arnold, Leeds, 1950.

M. M. LEWIS: 'Selection and the Primary School.' E. Blishen (ed.): op. cit. q.v.

K. LIEPMANN: *Apprenticeship – an Enquiry into its Adequacy under Modern Conditions*. Kegan Paul, 1960.

K. LINDSAY: *Social Progress and Educational Waste*. Routledge, 1926.

Letter from J. W. Lubbock to the Earl of Burlington upon the Manner of Conducting the Examinations for Degrees in Arts, 1838. Pamphlets Relating to the University of London, University Library.

SIR C. LYELL: *Travels in North America, 1841–46*. I. Murray, 1845.

C. C. LYNAM: *Examinations for Entrance Scholarships at the Public Schools*. Board of Education. Special Reports on Educational Subjects, VI, Cd. 418, 1900.

P. MAGNUS: 'Technical Education, its Progress and Prospects.' *Journal of the Society of Arts*, 17 March 1893, p. 428 ff.

C. E. MALLETT: *A History of the University of Oxford*, II, 1924, and III, 1927, Methuen.

A. P. MARTIN: *Life and Letters of the Right Honourable Robert Lowe, Viscount Sherbrooke*. Longmans, Green, 1893.

F. C. MARTIN: 'An Inquiry into Parents' Preferences in Secondary Education.' D. V. Glass (ed.): *Social Mobility, 1954*, q.v.

S. C. MASON: *The Leicestershire Experiment*. Councils and Education Press, 1957.

D. MASSON: 'London University, and London Colleges and Schools of Science. *Macmillan's Magazine*, October 1867.

G. MATTHEWS: 'The New Mathematics.' *The Times Educational Supplement*, 28 June 1963, p. 1413.

J. S. MILL: *On Liberty*. Longmans, Green, 1859.

L. P. F. MILLER: 'The Day to Day Effects of Selection on the Primary Schools.' E. Blishen (ed.): *Changing Schools, The Problems of Selection and some Solutions*, 1959, q.v.

C. T. MILLIS: *Technical Education, Its Development and Aims*. E. Arnold, 1925.

M. MOORMAN: *William Wordsworth*. Oxford, Clarendon Press, 1957.

J. MORLEY: *The Life of William Ewart Gladstone*. Macmillan, 1903.

N. MORRIS: 'An Historian's View of Examinations.' S. Wiseman (ed.): *Examinations and English Education*, 1962, q.v.

A. A. MUMFORD: *The Manchester Grammar School*. Longmans, 1919.

J. NAPLETON: *Consideration on the Public Exercises for First and Second Degrees in the University of Oxford*, 1805. First published anonymously in 1773. Oxford.

National Institute of Adult Education: *Liberal Education in a Technical Age*. Max Parish, 1955.

SIR P. NUNN: '"The Break at Eleven" and the Senior School.' *The Year Book of Education*. Evans, 1932.

D. OATES: 'Predicting School Achievement.' *The Journal Of Education*, August 1929.

K. B. OLDHAM: A New Advanced Level Syllabus in Chemistry. *The School Science Review*, XLIV, March 1963, No. 153.

R. A. C. OLIVER: *General Studies (Advanced) in the G.C.E.*. N.U.J.M.B., 1960.

The Effectiveness of General Certificate of Education Advanced Level as a Criterion for University Selection. N.U.J.M.B., August 1960.

The Joint Matriculation Board Examination in General Studies, 1957. N.U.J.M.B., 1958.

'The Selection of University Students.' *Universities Quarterly*, XVI, No. 3, June 1962.

Studies in a University Entrance Test in English. N.U.J.M.B., 1964.

The Training of Teachers in Universities. University of London Press, 1943.

R. OWEN: *A New View of Society, or Essays on the Principle of the Formation of the Human Character and the Application of the Principle to Practice*. Cadell and Davies, 1813.

OXFORD UNIVERSITY PUBLIC EXAMINERS: *Reasons for the Suggestion of Certain Alterations in the Examination Statute lately submitted to the Vice-Chancellor and Heads of Houses by the Public Examiners*. Baxter, Oxford, 1832. (University of London Bound Pamphlets 370 (B.P.I.).

M. PATTISON: 'Life of Macaulay.' Biographies of Lord Macaulay, 27th edn., Black, 1905.

Suggestions on Academical Organization with Especial Reference to Oxford. Edmonston and Douglas, Edinburgh, 1868.

R. R. PEDLEY (ed.): *Comprehensive Schools Today*. Councils and Education Press, 1955.

'Two-Tier Secondary Education, the Latest Phase.' E. Blishen (ed.): *Changing Schools, the Problems of Selection and some Solutions*, 1959, q.v.

P.E.P.: *The University Student*. P.E.P., 1949.

J. A. PETCH: *Before Admission.* Liverpool University Press, 1959.

Marks and Marking. N.U.J.M.B., October 1960.

Fifty Years of Examining. Harrap, 1953.

The Joint Matriculation Board, What it is and what it does. N.U.J.M.B., October 1963.

The Republic of Plato, with an Introduction by A. D. Lindsay. Everyman's Library, Dent, 1948.

BONAMY PRICE: *Oxford Reform.* James Parker, 1875.

Suggestions for the Extension of Professorial Teaching in the University of Oxford. Privately printed, 1850.

H. RASHDALL: *The Universities of Europe in the Middle Ages*, 3 Vols. New edn. by F. M. Powicke and A. B. Emden, Oxford University Press, 1936.

T. RAYMONT: 'Intelligence Tests.' *The Journal of Education*, June 1923.

H. RÉE: 'The Advantages of Selection.' E. Blishen (ed.): *Changing Schools, The Problems of Selection and some Solutions*, 1959, q.v.

SIR B. W. RICHARDSON: *The Health of Nations*, 2 Vols. (Works of Edwin Chadwick.) Longmans, 1887.

W. A. RICHARDSON: *The Technical College, its Organization and Administration.* Oxford University Press, 1939.

G. GIDLEY ROBINSON: *The Preparatory School Curriculum.* Board of Education Special Reports on Educational Subjects, VI, Cd. 418, 1900.

J. E. THOROLD ROGERS: *Education in Oxford, its Methods, its Aids and its Rewards.* Smith, Elder, 1861.

M. SADLER: 'The Scholarship System in England to 1890, and some of its Developments.' International Institute Examinations Enquiry: *Essays on Examinations*, 1936, q.v.

'University Day Training Colleges, their Origin, Growth and Influence in English Education.' *The Department of Education in the University of Manchester, 1890–1911.* Manchester University Press, 1911.

E. G. SANDFORD (ed.): *Memoirs of Archbishop Temple*, Vol. I. Macmillan, 1906.

J. SARGEAUNT: *The Annals of Westminster School.* Methuen, 1898.

R. SCHWICKERATH: *Jesuit Education.* Herder, St. Louis, 1903.

Science and Education: *Chemistry for Grammar Schools*, 1962. A section of the Science and Education Report issued by the Science Masters' Association and the Association of Women Science Teachers, Murray, 1962.

M. SHANKS: *The Stagnant Society.* Pelican, 1961.

B. SIMON: *The Common Secondary School.* Lawrence and Wishart, 1955.

LADY SIMON OF WYTHENSHAWE: 'Trends in Secondary Education.' E. Blishen (ed.): *Changing Schools, the Problems of Selection and some Solutions*, 1959, q.v.

ADAM SMITH: *The Wealth of Nations.* Everyman edn., 2 Vols. Introduction by E. R. A. Seligman. 1937–38.

F. SMITH: *The Life and Work of Sir James Kay-Shuttleworth.* Murray, 1923.

PROF. GOLDWIN SMITH: *Reorganization of the University of Oxford.* Parker, 1868.

T. J. A. SMITH: 'Some Aspects of Examinations, 1800–58.' Unpublished Southampton M.A. Thesis, 1957.

C. P. SNOW: *The Two Cultures and the Scientific Revolution.* Rede Lecture, 1959.

C. SPEARMAN: 'Note on the Reliability and Validity of Measurements'. International Institute Examinations Enquiry: *Essays on Examinations*, 1936, q.v.

W. W. STEPHENS (ed.): *The Life and Writings of Turgot, Comptroller-General of France, 1774–76.* Longmans, Green, 1895.

A. SUTCLIFFE and J. W. CANHAM: *Selection for Secondary Education without a Written Examination.* Murray, 1945.

R. H. TAWNEY: *Religion and the Rise of Capitalism*, 1922. Pelican, 1948.

Secondary Education for All. Allen and Unwin, 1922.

W. TAYLOR: *The Secondary Modern School.* Faber, 1963.

H. THOMAS: *The Story of Sandhurst.* Hutchinson, 1961.

J. THOMPSON: *Secondary Education Survey; An Analysis of L.E.A. Development Plans for Secondary Education.* Fabian Research Series No. 148. Victor Gollancz, 1952.

SYLVANUS THOMPSON: 'Apprenticeship: Scientific and Unscientific.' *Journal of the Society of Arts*, 1869.

G. H. THOMPSON: 'The Northumberland Mental Tests.' *The British Journal of Psychology*, XII December 1921.

B. THWAITES: *On Teaching Mathematics. An Outcome of Discussions and Lectures at the Southampton Mathematical Conference under the Chairmanship of Bryan Thwaites.* Pergamon Press, 1961.

A. I. TILLYARD: *A History of University Reform.* Heffer, Cambridge, 1913.

H. TRISTRAM: *The Idea of a Liberal Education: A Selection from the Works of Newman.* Harrap, 1952.

B. TRUSCOTT: *Redbrick and these Vital Days.* Faber, 1945.

M. TYLECOTE: *The Mechanics' Institutes of Lancashire and Yorkshire before 1851.* Manchester University Press, 1957.

J. VAIZEY: *The Costs of Education.* Allen and Unwin, 1958.

P. E. VERNON: *The Measurement of Abilities.* University of London Press, 1955.

'Creativity and Intelligence.' *Educational Research*, VI, No. 3, June 1964.

R. V. VERNON and N. MANSERGH (eds.): *Advisory Bodies. A Study of Their Uses in Relation to Central Government, 1919–39.* Allen and Unwin, 1940.

A. S. WALKER: *Pupils' School Records.* National Foundation for Educational Research in England and Wales. Newnes, 1955.

W. D. WALL: *Educational Research and the Needs of Schools.* Address to the 1959 Conference of the National Association of Inspectors of Schools and Educational Organizers.

A. F. WATTS, D. A. PIDGEON and A. YATES: *Secondary School Entrance Examinations*. Newnes, 1952.

W. WHEWELL: *Of a Liberal Education in General and with Particular Reference to the Leading Studies of the University of Cambridge*. Parker and Sons, 1845.

A. N. WHITEHEAD: *The Aims of Education, and Other Essays*. Williams and Norgate, 1932.

F. WHITEHEAD: 'External Examinations Examined.' *The Journal of Education*, January 1956.

W. H. WHYTE: *The Organization Man*. Jonathan Cape, 1957.

LADY G. WILLIAMS: *Recruitment to the Skilled Trades*. Routledge and Kegan Paul, 1957.

S. WISEMAN (ed.): *Examinations and English Education*. Manchester University Press, 1961.

J. WOLFENDEN: 'The Secondary School Examinations Council and the Evolution of Policy on External Examinations.' G. B. Jeffery (ed.): *External Examinations in Secondary Schools*. q.v.

SIR H. T. WOOD: *A History of the Royal Society of Arts*. Murray, 1913.

A. YATES and D. A. PIDGEON: *Admission to Grammar Schools*. Newnes, 1957.

M. YOUNG: *The Rise of the Meritocracy*. Thames and Hudson, 1958.

C. S. YOAKUM and R. M. YERKES: *Mental Tests in the American Army*, Sidgwick and Jackson, London, 1920.

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